#### UNITED STATES DISTRICT COURT FOR THE DISTRICT OF MASSACHUSETTS

JOHN HANCOCK LIFE INSURANCE
COMPANY, JOHN HANCOCK
VARIABLE LIFE INSURANCE
COMPANY and MANULIFE
INSURANCE COMPANY.

CIVIL ACTION NO. 05-11150-DPW

Plaintiffs,

v.

ABBOTT LABORATORIES,

Defendant.

#### ABBOTT'S DEPOSITION DESIGNATIONS AND COUNTER\_DESIGNATIONS FOR ROGER G. NASTOU

Defendant Abbott Laboratories ("Abbott") respectfully submits the attached deposition designations and counter-designations for the October 3, 2006 deposition of Roger G. Nastou, former Head of Bond and Corporate Finance Department, John Hancock.

Dated: February 18, 2008

Respectfully submitted,

#### ABBOTT LABORATORIES

By: \_\_/s/ Eric J. Lorenzini\_\_\_\_ Eric J. Lorenzini

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and

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#### **CERTIFICATE OF SERVICE**

I hereby certify that this document(s) filed through the ECF system will be sent electronically to the registered participants as identified on the Notice of Electronic Filing (NEF) and paper copies will be sent to those indicated as non registered participants on February 18, 2008.

Date: February 18, 2008.	
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	/s/ Ozge Guzelsu

#### **Natsou Deposition Designations**

Depo Date	Witness	Hancock Designation	Abbott Counter Designation	Abbott Designation	Deposition Exhibit	Plaintiff Exhibit	Defendant Exhibit
10/03/06	Nastou, Roger	6:12-6:13					
10/03/06	Nastou, Roger			9:3-9:9			
10/03/06	Nastou, Roger	12:3-12:14					
10/03/06	Nastou, Roger			13:16-13:18			
10/03/06	Nastou, Roger	14:8-14:13					
10/03/06	Nastou, Roger			14:18-15:2			
10/03/06	Nastou, Roger			15:23-16:2			
10/03/06	Nastou, Roger			16:8-17:3			
10/03/06	Nastou, Roger			17:20-18:23			
10/03/06	Nastou, Roger			22:8-22:11			
10/03/06	Nastou, Roger			22:16-23:2			
10/03/06	Nastou, Roger			23:16-24:3			
10/03/06	Nastou, Roger			26:10-26:13	1		
10/03/06	Nastou, Roger			26:20-27:8	1		
10/03/06	Nastou, Roger			28:22-29:22			
10/03/06	Nastou, Roger			30:8-30:9	2		

Depo Date	Witness	Hancock Designation	Abbott Counter Designation	Abbott Designation	Deposition Exhibit	Plaintiff Exhibit	Defendant Exhibit	
10/03/06	Nastou, Roger			30:14-30:23	2			
10/03/06	Nastou, Roger			37:1-37:18				
10/03/06	Nastou, Roger			44:5-44:22	6			
10/03/06	Nastou, Roger			45:10-47:3				
10/03/06	Nastou, Roger			47:10-47:15	7			
10/03/06	Nastou, Roger			47:22-48:9	6			
10/03/06	Nastou, Roger			50:12-50:20				
10/03/06	Nastou, Roger			51:10-51:14				
10/03/06	Nastou, Roger			51:19-52:4				
10/03/06	Nastou, Roger	56:8-56:17						
10/03/06	Nastou, Roger			62:13-62:23				
10/03/06	Nastou, Roger			63:16-63:17	8	LG		
10/03/06	Nastou, Roger			64:10-65:9				
10/03/06	Nastou, Roger			66:7-67:11				
10/03/06	Nastou, Roger	67:12-67:15					<del></del> .	
10/03/06	Nastou, Roger			69:8-69:12				
10/03/06	Nastou, Roger			69:22-70:1				
10/03/06	Nastou, Roger			75:18-77:13				

Depo Date	Witness	Hancock Designation	Abbott Counter Designation	Abbott Designation	Deposition Exhibit	Plaintiff Exhibit	Defendant Exhibit
10/03/06	Nastou, Roger			81:11-82:2			
10/03/06	Nastou, Roger			82:19-83:8	10		
10/03/06	Nastou, Roger			92:23-93:19			

### **Color Key to Deposition Designations**

Designation by Plaintiffs

Counter Designation by Defendants

**Designation by Defendants** 

1	Volume: I
2	Pages: 1-109
3	Exhibits: 1-15
4	UNITED STATES DISTRICT COURT
5	FOR THE
6	DISTRICT OF MASSACHUSETTS
7	x
8	JOHN HANCOCK LIFE INSURANCE COMPANY,
9	JOHN HANCOCK VARIABLE LIFE INSURANCE
10	COMPANY, and MANULIFE INSURANCE COMPANY
11	(f/k/a INVESTORS PARTNER INSURANCE COMPANY)
12	Plaintiffs,
13	v. Civil Action No. 05-1150DPW
14	ABBOTT LABORATORIES,
15	Defendant.
16	X
17	VIDEO DEPOSITION OF ROGER G. NASTOU
18	Tuesday, October 3, 2006
19	1:22 p.m.
20	Donnelly, Conroy & Gelhaar
21	One Beacon Street
22	Boston, Massachusetts
23	Reporter: Carol A. Pagliaro, CSR/RPR/RMR
24	

1	Α	Ρ	Р	Ε	Α	R	Α	Ν	С	Е	S:

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- 3 CHOATE HALL & STEWART LLP
- 4 By Joseph H. Zwicker, Esq.
- 5 Two International Place
- 6 Boston, Massachusetts 02110
- 7 617-248-5000
- 8 Counsel for the Plaintiffs

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- 10 MUNGER, TOLLES & OLSON LLP
- 11 By Eric J. Lorenzini, Esq.
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- Los Angeles, California 90071-1560
- 14 213-683-9207
- 15 Counsel for the Defendant

16

17 ALSO PRESENT: Jason Lachapelle, Videographer

18

19

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21

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23

24

## PART 2

- 1 ATTY. ZWICKER: Joseph Zwicker, Choate,
- 2 Hall & Stewart, for plaintiffs.
- 3 THE VIDEOGRAPHER: The court reporter
- 4 today is Carol Pagliaro. Would the reporter please
- 5 swear in the witness.
- 6 ROGER G. NASTOU
- 7 a witness called for examination by counsel for the
- 8 Defendant, being first duly sworn, was examined and
- 9 testified as follows:
- 10 DIRECT EXAMINATION
- 11 BY ATTY. LORENZINI.
- 12 Q. Good afternoon, Mr. Nastou.
- 13 A. Good afternoon.
- 14 Q. Have you ever been deposed before?
- 15 A. Once before.
- 16 Q. You may be somewhat familiar with sort of
- 17 how this works, but I'll just refresh your
- 18 recollection a little bit. The court reporter is
- 19 taking down everything we say, and in order for her
- 20 to get a clean transcript, it's important not to
- 21 interrupt each other, so I'll try not to interrupt
- 22 you when you are answering a question, and if you
- 23 could just wait until I finish a question, that
- 24 would be helpful, and it's important that you answer

- 1 A. I believe that is when I started at John
- 2 Hancock.
- Q. So what year was that that you started at
- 4 John Hancock?
- 5 A. 1970.
- 6 Q. What was your initial position at John
- 7 Hancock?
- 8 A. I was an analyst, investment analyst in the
- 9 Bond area.
- 10 Q. How long did you hold that position of
- 11 investment analyst?
- 12 A. Well, the combination of investment analyst
- and team leader of several other investment analysts
- 14 went on until about 1980, about 10 years.
- 15 Q. And what were your responsibilities as an
- 16 investment analyst during that period from 1970 to
- 17 about 1980?
- 18 A. Well, I looked at bond transactions,
- 19 evaluated the credit risk on these transactions. It
- 20 was -- we mainly did -- we did a lot of private
- 21 placements, so it was very similar to what a bank
- 22 lending officer would do, only over -- the loans
- 23 were made over a longer period than bank loans.
- 24 They would be 10, 20 year loans.

- 1 ATTY. ZWICKER: Mr. Nastou, all he is
- 2 asking is how long you held the role.
- Q. What were your responsibilities as Portfolio
- 4 Manager?
- 5 ATTY. ZWICKER: I think he might have
- 6 just answered it. Go ahead.
- 7 A. Well, looking at the transactions with the
- 8 analysts and giving the rate to the liability
- 9 people.
- Q. What do you mean by giving the rate to the
- 11 liability people? Which rate are you referring to?
- 12 A. The rate at which we could issue
- 13 liabilities, the way we priced the liabilities,
- 14 based on what we could invest in for assets.
- 15 Q. What was your next position after Portfolio
- 16 Manager?
- 17 A. Department head.
- 18 Q. Which department?
- A. Bond and Corporate Finance.
- Q. When did you assume that position?
- A. Well, it was early to mid-nineties.
- Q. And what is the Bond and Corporate Finance
- 23 Department?
- A. We invest a large part of the company's

- 1 investible funds, and we invest primarily in bonds,
- 2 those public bonds and private placements. Maybe a
- 3 hundred people worked there, 50 investment
- 4 professionals.
- 5 ATTY. ZWICKER: Just so the record is
- 6 clear, I think the witness understood the question
- 7 to be what was Bond and Finance when he was in
- 8 charge of it --
- 9 THE WITNESS: Right.
- 10 ATTY. ZWICKER: -- not what it is
- 11 today.
- 12 ATTY. LORENZINI: That is correct. That
- 13 was the intent of my question.
- 14 A. Right, right, right. We invested about \$10
- 15 billion a year.
- Q. How long were you head of the Bond and
- 17 Corporate Finance Department?
- 18 A. I think 7 years.
- 19 Q. So what year did you leave that --
- A. Actually, for the first 5 years or so I had
- 21 a co-head.
- Q. Who was that co-head?
- A. Jane Philippi.
- Q. How do you spell the last name?

# PART 3

- 1 A. I think it is PHILIPPI. I could get
- 2 it for you exactly, if you want me to.
- 3 Q. Sure.
- 4 ATTY. ZWICKER: Mr. Nastou, why don't we
- 5 wait until break.
- 6 ATTY. LORENZINI: We can do it at break,
- 7 yes.
- 8 Q. Approximately when did you have full
- 9 responsibility for heading the department, as
- 10 opposed to co-chairing?
- 11 A. About 2000.
- 12 Q. Then how long did you remain as department
- 13 head after 2000?
- A. Until I had a cerebral hemorrhage at the end
- 15 of 2001, and then while I continued to --
- 16 ATTY. ZWICKER: All he is asking you is
- 17 how long you stayed head of...
- A. Well, it was actually until -- I was the
- head of it until 2000 -- June of 2002, maybe May of
- 20 2002.
- Q. Was there a period when you were on medical
- 22 leave in 2001, 2002?
- 23 A. Yes.
- Q. How long, approximately, was that?

- A. I think about 5 months, 4 or 5 months. I'm
- 2 sorry, instead of 2002, it was 2003.
- 3 Q. Did you have and -- have you had any
- 4 involvement with John Hancock since June 2003?
- 5 A. Yes, I was a consultant to the department
- 6 for a year, until about May -- June of 2004.
- 7 Q. And then after that?
- 8 A. After that I'm on a very small -- a
- 9 committee that meets infrequently; it's an advisory
- 10 committee for our mezzanine funds.
- 11 Q. Does that committee have a formal name?
- 12 A. I think it's just the Mezzanine Advisory
- 13 Committee.
- 14 Q. And what do you mean by "mezzanine funds";
- 15 could you describe that to me?
- 16 A. We manage some money for other people, and
- 17 this is what the funds are. I think there are 3
- 18 funds, and mezzanine investing would be investing in
- 19 -- usually in smaller leveraged companies, taking
- 20 subordinated positions in those companies,
- 21 subordinated positions and equity participations in
- 22 those companies.
- Q. What were your responsibilities going back
- to when you were head of the Bond and Corporate

- 1 Finance Department? What were your responsibilities
- 2 in that role?
- 3 ATTY. ZWICKER: As chair or co-chair?
- 4 Q. Was chair the official title?
- 5 A. I don't know; I was head of the department.
- 6 The question is when we had two of us there or just
- 7 one.
- 8 Q. I'm only concerned really about the period
- 9 when you were the only head of that department.
- 10 What were your responsibilities.
- A. Well, it was like a typical head of the
- department where the overall responsibilities are
- for the department, and its performance, and its
- relationships with the company, our customers, our
- suppliers, etc., etc., overall responsibility for
- that, responsibility for the people, hiring,
- evaluating, firing, and then making sure that our
- 18 investment process was working in a way we had
- intended it to work, and if there were any
- 20 improvements that needed to be made, being
- 21 responsible for those improvements, but that's it,
- 22 basically responsible for the investment process,
- and the people doing it, and making sure the
- relationships were kept up. Occasionally I would

- 1 get involved in looking at an investment itself.
- Q. Looking at a particular investment?
- A. Right.
- 4 Q. You didn't routinely look at specific
- 5 investments?
- 6 A. Well, the investments would come before a
- 7 meeting that we had, several that we would have, and
- 8 I'd look at them at that point, but this would not
- 9 necessarily be the in-depth give and take that
- 10 somebody would have when they were thinking about
- 11 deciding whether to recommend it or not. That would
- 12 generally take place between the analyst, the
- 13 analyst team leader, the portfolio people, and
- 14 sometimes I would be involved in that.
- 15 ATTY. ZWICKER: Mr. Nastou, I think the
- 16 question was just whether you typically would look
- 17 at investments, so try to focus on the question and
- 18 just answer it as best you can.
- 19 A. Not typically.
- Q. Thank you. Did the Bond and Corporate
- 21 Finance Group have guidelines or policies regarding
- the minimum expected rate of return for an
- 23 investment with a particular risk level?
- 24 ATTY. ZWICKER: When?

### PART 4

- 1 Q. At any time while you were head of the
- 2 department.
- A. Minimum, no. We had levels that we were
- 4 hoping to achieve, and we wanted to do better than
- 5 that, but many times we took investments where we
- 6 knew we were going to get less than that.
- 7 Q. Why would you sometimes take investments
- 8 that had a lower expected rate of return than what
- 9 you would hope for?
- 10 ATTY. ZWICKER: Objection. You can
- 11 answer.
- 12 THE WITNESS: I can answer?
- 13 ATTY. ZWICKER: Yes.
- A. Because we had more money to invest than we
- had investments that presented themselves, and, on
- average, if it achieved the company's requirements,
- 17 then everything worked.
- 18 Q. What were the company's requirements on
- 19 average at the time that you were at the department?
- A. They moved around a lot, and I really can't
- 21 -- they would move around with the markets.
- 22 Basically we tried to cover our expenses and cost of
- 23 capital.
- Q. What was your cost of capital in year 2000,

- 1 the job and I left.
- 2 Q. Who was the person Manulife brought into
- 3 that position?
- 4 A. Paul English.
- 5 Q. What was the title of that position?
- 6 A. I don't know. It was Senior Credit Officer,
- 7 I think.
- 8 Q. Did there come a time when you were involved
- 9 in consideration of an investment in compounds being
- 10 developed by Abbott Laboratories?
- 11 A. Yes.
- 12 Q. When did you, to your recollection, first
- 13 become aware of a potential investment opportunity
- 14 in compounds being developed by Abbott?
- 15 A. I don't remember the time.
- Q. Do you remember who you first learned about
- 17 that potential investment from?
- A. Steve Blewitt.
- 19 Q. Do you remember anything about what Steve
- 20 Blewitt said initially to you about the proposed
- 21 investment?
- A. Well, I remember it was an R&D joint venture
- with Abbott and that he would like to work on the
- 24 analysis. It was very preliminary.

- 1 Q. What was your reaction?
- 2 A. It was encouraging him.
- Q. Did you think the investment opportunity had
- 4 promise at that time?
- 5 A. At that time it didn't -- didn't know. It
- 6 was just one of those things that comes in and you
- 7 work on it.
- 8 Q. Was it unusual for Abbott to invest in the
- 9 development of a product in return for royalty
- 10 payments or a share of profits?
- 11 ATTY. ZWICKER: Objection. You can
- 12 answer.
- 13 A. I have no idea what they would do.
- 14 Q. Did I say Abbott?
- 15 A. Yes.
- Q. I meant John Hancock. Was it unusual for
- 17 John Hancock to make an investment in development of
- a product in exchange for a stream of royalties or a
- share of profits from sales of the product?
- 20 ATTY. ZWICKER: Objection. Vague,
- 21 overbroad, vague as to time as well. You can answer
- 22 if you can.
- Q. I'm just asking from your personal
- 24 experience.

- 1 A. Unusual, yes, but I believe we did similar
- 2 transactions and certainly looked at plenty of
- 3 transactions like that.
- 4 Q. What other transactions, besides Abbott, did
- 5 John Hancock make that are similar in structure to
- 6 what I just described?
- 7 ATTY. ZWICKER: Objection. Vague.
- 8 A. I don't recall the specifics.
- 9 Q. So you don't recall any specific investment
- 10 that Abbott made in the development of a product in
- 11 exchange for royalty payments or a percentage of
- 12 profit from sales of the product?
- 13 A. I don't recall.
- 14 Q. When you became involved in consideration of
- 15 a potential investment in products being developed
- 16 by Abbott, did you have any communications with
- 17 anyone at Abbott?
- 18 ATTY. ZWICKER: At any time?
- 19 ATTY. LORENZINI: At any time during the
- 20 phase of considering whether to make this investment
- 21 in the Abbott products.
- 22 ATTY. ZWICKER: Prior to the execution
- 23 of the agreement?
- 24 ATTY. LORENZINI: Prior to the execution

## PART 5

- 1 the period when you were considering the investment
- 2 in the Abbott compounds?
- 3 A. Could you narrow that down a little; I
- 4 worked with a lot of people at John Hancock. Do you
- 5 mean just in connection with this investment?
- Q. Correct.
- 7 A. Well, Steve Blewitt, and I don't know who
- 8 the others were. I don't recall who they were, I
- 9 should say.
- 10 ATTY. LORENZINI: I'm going to mark as
- an exhibit, we will call this, Nastou Exhibit 1.
- 12 (Document marked as Exhibit 1
- for identification.)
- 14 Q. If you could take a moment to flip through
- this document to see if you recall it, I'll ask you
- 16 a couple of questions.
- 17 A. Well, I remember seeing --
- 18 ATTY. ZWICKER: Let him ask a question.
- 19 A. Go ahead.
- Q. You anticipated my question, I'm sure. Do
- you recall seeing this document that has been marked
- 22 as Nastou Exhibit 1?
- A. I remember seeing something -- some
- 24 documents, I don't remember this particular one, and

- 1 I don't really remember the specifics of any of
- 2 them.
- Q. If you look at the upper right-hand corner
- 4 there is some handwriting that says, For 9:30 AM
- 5 4/14/00 with RGN?
- 6 A. That would be me.
- 7 Q. RGN is your initials?
- 8 A. Yes.
- 9 Q. Is that your handwriting?
- 10 A. No.
- 11 Q. Do you recognize the handwriting?
- 12 A. No.
- 13 Q. Do you recall whether you had a telephone
- 14 conference or a meeting regarding the potential
- 15 Abbott investment on April 14, 2000?
- 16 A. No.
- 17 Q. If you look on the left side of this
- 18 document at the top it says, Arthur Higgins
- 19 President of Pharma; do you know who Arthur Higgins
- 20 is?
- 21 A. No.
- Q. Do you recall having any telephone
- 23 conference or meeting with Arthur Higgins?
- 24 A. No.

- 1 Q. Do you know what Pharma is?
- 2 A. No.
- 3 ATTY. ZWICKER: As used in this
- 4 document, right, because Pharma is a shorthand term
- 5 for pharmaceutical industry. By "Pharma," I assume
- 6 you mean Pharma as an entity, and not --
- 7 Q. Do you know of any company named Pharma?
- 8 A. No.
- 9 Q. If you look to page JH2310?
- 10 A. Page which?
- 11 Q. At the bottom I see numbers. In the first
- 12 paragraph it says, John Hancock is considering
- 13 committing, and then it says in brackets, 50
- 14 million, per year for a period of four years to fund
- 15 the development and commercialization of our
- 16 specified pool of compounds owned by Abbott.
- 17 ATTY. ZWICKER: 2310?
- 18 ATTY. LORENZINI: Yes.
- 19 ATTY. ZWICKER: Oh, I'm sorry, we were
- 20 looking at 2311.
- 21 A. Okay.
- Q. The next sentence says, During the four year
- period, Abbott will commit three to four times John
- 24 Hancock's investment for those compounds; do you see

- 1 that?
- 2 A. Right.
- Q. Do you recall that the terms that were being
- 4 discussed called for Abbott to make investment in
- 5 certain compounds in a certain ratio to the
- 6 investment made by Abbott?
- 7 ATTY. ZWICKER: Do you understand the
- 8 question? He is not asking you to read the
- 9 document; he is asking you whether or not having
- read that paragraph refreshes your recollection
- 11 about some detail of the investment.
- A. I recall that Abbott was going to be
- 13 investing money in these compounds simultaneously
- 14 with the John Hancock.
- Q. Do you recall that they were to contribute a
- certain ratio; for example, three to four times what
- 17 John Hancock invested?
- 18 ATTY. ZWICKER: Who is the "they"?
- 19 ATTY. LORENZINI: Abbott.
- A. I recall they were to invest a certain
- ratio, at a certain ratio to our investing, but I
- don't remember what it was.
- Q. Do you recall who drafted this document,
- 24 Exhibit 1?

# PART 6

- 1 A. No.
- Q. Do you recall the purpose of this document?
- A. No, I don't recall the document.
- 4 ATTY. LORENZINI: I'll mark as Exhibit 2
- 5 a e-mail dated May 8, 2000 with an attached
- 6 investment analysis. This is a document with Bates
- 7 Numbers JH2423 to 2429.
- 8 (Document marked as Exhibit 2
- 9 for identification.)
- 10 ATTY. LORENZINI: Why don't you just
- 11 takes a moment to flip through this document to see
- 12 if you recall it, then I'll ask a couple of
- 13 questions.
- Q. Mr. Nastou, having had a chance to look
- through Nastou Exhibit No. 1, do you recall this
- 16 document?
- 17 A. You meant Nastou Exhibit No. 2?
- 18 Q. Yes.
- 19 A. I don't recall it.
- Q. Do you have any reason to doubt that you
- 21 received this e-mail -- actually this isn't an
- e-mail -- this memoranda with this attachment?
- A. No reason to doubt it.
- Q. Who are the people listed in the To line of

- What about the section about a Baa
- 2 credit rating? In your experience, what does a Baa
- 3 credit rating correspond to in terms of annual loss?
- 4 ATTY. ZWICKER: Objection.
- Q. Probability of a loss of an investment?
- 6 ATTY. ZWICKER: Objection.
- A. 30 basis points, on average, through good
- 8 and bad cycles, through the cycles. Some years you
- 9 don't lose as much, some years you lose more, and it
- would not include a disastrous loss like the
- depression. This would be non-depression type, sort
- 12 of normal losses.
- 13 Q. And does the Baa credit rating correspond
- specifically with the 30 basis points, or is there a
- 15 range?
- A. Well, there are ranges within Baa, and they
- would be less loss for the higher quality, greater
- 18 loss for the lower quality Baa's.
- 19 Q. If you look at the next page it has
- 20 estimated cash flow. Do you know where these
- 21 figures in the Aggregate Cash Received column come
- 22 from? Do you know what the source of those figures
- 23 is?
- 24 A. No.

- 1 A. I remember the name; I don't remember the
- 2 investment.
- 3 ATTY. LORENZINI: I'm going to mark as
- 4 Nastou Exhibit 6 --
- 5 (Discussion regarding exhibit number
- 6 amongst Attorneys and Reporter.)
- 7 (Document marked as Exhibit 6
- 8 for identification.)
- 9 ATTY. LORENZINI: Nastou 6, which was
- previously marked as Walsh 6, is a document Bates
- numbered JH001185-1202, and this is somewhat
- similar to the portion of the compilation we were
- 13 just looking at.
- 14 Q. Do you recognize this document, Mr. Nastou?
- 15 ATTY. ZWICKER: I'll object to the
- 16 characterization of the document, but do you
- 17 recognize this document standing by itself?
- 18 THE WITNESS: I don't remember this
- 19 specific document. It looks like --
- 20 ATTY. ZWICKER: The question is, Do you
- 21 remember this specific document.
- 22 THE WITNESS: Okay. I don't.
- 23 ATTY. LORENZINI: Could we go off the
- 24 record just for a second.

- 1 ATTY. ZWICKER: Yes.
- 2 THE VIDEOGRAPHER: Going off the record.
- 3 The time is 2:30.
- 4 (Discussion off the record.)
- 5 THE VIDEOGRAPHER: We are back on the
- 6 record. The time is 2:31.
- 7 Q. So am I correct that you don't recall this
- 8 document that has been marked as Nastou Exhibit 6?
- A. That's correct.
- Q. Do you recognize the format of this
- 11 document?
- 12 A. Yes.
- Q. Is this a format that is typically used by
- 14 John Hancock for a certain purpose?
- 15 A. Yes.
- 16 Q. What purpose is that used for, that format?
- 17 A. Again it's a Yellow Report format, and it is
- used for 2 committee meetings that we have when
- 19 considering investments.
- Q. What are those 2 committees?
- A. Well, one is the Bond and Corporate Finance
- meeting with the whole Bond Department there and a
- few other members of the investment area of the John
- Hancock, and the other is the Finance Committee of

## PART 7

- 1 our Board of Directors.
- Q. If you look at the top of this document it
- 3 says recommendation to BIC; is that the Bond
- 4 Investment Committee that you were just referring
- 5 to?
- 6 A. Yes.
- 7 Q. And below this it says, Report to COF?
- 8 A. Yes.
- 9 Q. Is that the Committee on Finance?
- 10 A. Yes.
- 11 Q. And that's the other committee you were
- 12 referring to?
- 13 A. Yes.
- Q. And so just judging by the standard format
- that John Hancock uses, does this mean that this
- 16 investment opportunity would have been recommended
- to the Bond Investment Committee on September first,
- 18 2000?
- 19 ATTY. ZWICKER: Remember, he is asking
- you based upon your experience, not based on your
- 21 recollection of the events that are described in
- this document, okay?
- THE WITNESS: That's right.
- A. Well, I don't recollect the events in the

- document, but based on my experience, it appears
- 2 that the investment is recommended to the Bond
- 3 Investment Committee.
- 4 ATTY. LORENZINI: Hold on to that one.
- 5 I'm going to have some further questions, but I'm
- 6 going to mark another exhibit as Nastou Exhibit 7,
- 7 which appear to be minutes of a Bond Investment
- 8 Committee, dated September 21, 2000, Bates stamped
- 9 JH005573.
- 10 (Document marked as Exhibit 7
- 11 for identification.)
- 12 Q. And do you recognize this document which
- appears to be minutes of a Bond Investment Committee
- 14 meeting?
- 15 A. I recognize the form.
- 16 Q. Do you see at the top it says present and it
- 17 lists several people, including you?
- 18 A. Yes.
- 19 Q. Did you attend a meeting of the Bond
- 20 Investment Committee on September 21, 2000?
- 21 A. I don't recall.
- Q. Do you recall attending any meeting of the
- Bond Investment Committee at which the potential
- 24 investment in the Abbott compounds was discussed?

- 1 A. Yes.
- Q. And do you recall, at that meeting,
- 3 reviewing a Yellow Report?
- 4 A. Yes.
- Q. Do you have any reason to think that the
- 6 Yellow Report that you have reviewed at that meeting
- 7 was different than what is marked as Nastou Exhibit
- 8 6?
- 9 A. No.
- 10 Q. But you don't have any independent
- 11 recollection of ever receiving Nastou Exhibit 6?
- 12 A. That's right.
- 13 Q. Do you recall -- at the meeting of the Bond
- 14 Investment Committee that you attended where the
- 15 Abbott investment was discussed, do you recall any
- 16 other documents being distributed at or before the
- 17 meeting concerning that transaction, other than the
- 18 Yellow Report?
- 19 A. I don't. I don't recall it.
- 20 Q. In the general practice of the Bond
- 21 Investment Committee would there be any other
- 22 documents reviewed by committee members, other than
- 23 the Yellow Report, prior to recommending an
- 24 investment?

- 1 ATTY. ZWICKER: Asked and answered. You
- 2 can answer if you can.
- A. I don't recall.
- 4 Q. I mean, were they spreadsheets, were they
- 5 term sheets?
- 6 A. I don't recall. I can speculate if you
- 7 want.
- Q. Don't speculate.
- 9 ATTY. ZWICKER: He wants your best
- 10 recollection.
- 11 A. I don't know. I don't recall.
- 12 Q. Did Mr. Blewitt make a presentation
- 13 regarding the proposed investment in Abbott at the
- 14 Bond Investment Committee?
- 15 A. Yes.
- Q. Was anyone else involved in making that
- 17 presentation?
- A. I don't remember. I have a feeling Scott
- 19 Hartz was, but I really don't have a strong
- 20 recollection of it.
- Q. Do you recall if Mr. Blewitt, or Mr. Hartz,
- 22 for that matter, provided any information to the
- 23 committee, other than what was reflected in the
- 24 Yellow Report?

# PART 8

- 1 A. I don't really understand your question.
- 2 Let me just tell you why. It was sort of like
- 3 anyone with a written report and a verbal
- 4 explanation of the report, the verbal explanation
- 5 never exactly tracks word for word what is in there,
- 6 and there may be questions and explanation of what
- 7 it means, but beyond that I don't recall anything
- 8 about a presentation that would have been different
- 9 than that.
- 10 Q. So you don't recall anything specific that
- 11 Mr. Blewitt or Mr. Hartz said independent of what is
- 12 in the Yellow Report?
- 13 A. No.
- 14 ATTY. ZWICKER: Objection.
- 15 Q. Do you recall any of the discussion in the
- 16 committee, during or after the presentation,
- 17 regarding the Abbott transaction?
- 18 A. No.
- Q. Do you recall if any of the committee
- 20 members had any concerns about the risks associated
- 21 with the investment?
- A. My recollection was that there were --
- 23 ATTY. ZWICKER: He is asking about the
- 24 meeting now.

- THE WITNESS: At the meeting, right?
- 2 ATTY. LORENZINI: Yes.
- A. -- that there were questions, but the
- 4 questions were answered to people's satisfaction.
- 5 (Reporters asks Witness for
- 6 clarification.)
- 7 Q. Do you remember any particular questions
- 8 that were posed by committee members?
- 9 A. No.
- 10 Q. Do you remember any particular answers that
- 11 were given in response to questions?
- 12 A. No.
- 13 Q. Do you recall any other questions from the
- 14 committee not limited to risks associated with the
- 15 investment, but any questions on any subject?
- 16 A. No.
- 17 Q. Take a look, if you will, back at Nastou
- 18 Exhibit 6. If you look down at the bottom of the
- 19 first page, second to the last sentence, it says,
- 20 This is approximately equivalent to a 60 basis point
- 21 annual loss over 5 years or a Ba1 credit rating, and
- then if you will turn to the next page, under Issue
- 23 Rating it states, JH: Ba2?
- A. Right.

- 1 and above the amount invested by Abbott?
- 2 ATTY. ZWICKER: Hancock.
- 3 ATTY. LORENZINI: Sorry.
- 4 A. Yes, but I don't remember the amount.
- Q. Since I garbled that last question, I'm just
- 6 going to ask it again.
- 7 A. Go ahead.
- 8 Q. Do you recall, even though you don't recall
- 9 the specific amounts, that Abbott committed to spend
- a certain amount of money, in addition to the funds
- 11 invested by John Hancock?
- 12 A. Yes.
- Q. You don't recall Abbott committing to spend
- any aggregate amount of funds on research and
- development on the compounds, regardless of how much
- 16 John Hancock invested, do you?
- 17 A. No.
- 18 Q. If you turn to page 6, the second to last
- 19 sentence of the paragraph headed Expected accounting
- 20 treatment, it says, This is the same method we use
- 21 to account for our CBO equity investments. What is
- 22 a CBO equity investment?
- A. A CBO is a collateralized bond obligation.
- 24 Do you want me to explain that?

- 1 talk about the specifics of how it works.
- Q. Have you ever seen a spreadsheet that
- 3 provides a Monte Carlo simulation for an investment?
- 4 A. I've seen the results of these simulations,
- 5 but I -- beyond that I couldn't really explain --
- 6 shed any light on them.
- 7 Q. When you say you have seen the results, do
- 8 you mean a summary form of the results?
- 9 A. Yes.
- 10 Q. But you haven't actually seen a spreadsheet
- 11 with the actual calculations?
- 12 A. No.
- Q. In your experience as head of the Bond and
- 14 Corporate Finance Group, did John Hancock often use
- Monte Carlo simulations to calculate the expected
- 16 return on investments?
- 17 A. Not often.
- 18 Q. Why not?
- A. Well, most of the investments that we made
- 20 were -- had more to do with credit analysis of the
- 21 individual credit where -- they may have been used
- for this sort of simulation in there, but generally
- 23 that wasn't what was used.
- Q. If you turn back to Page 10, a few sentences

# PART 9

- 1 down under Summary Budget, it says, In addition,
- 2 based on the stage of the development of the Program
- 3 Compounds, and their expected sales, we have valued
- 4 the Program Compounds today at approximately \$1
- 5 billion.
- 6 A. Okay. I see that.
- Q. Do you have any independent recollection of
- 8 John Hancock estimating the current value of the
- 9 program compounds?
- 10 A. No.
- 11 ATTY. LORENZINI: I'm going to mark as
- 12 Exhibit Nastou 8, a document that is Bates stamped
- 13 JH005551 through 5553, and it appears to be the
- 14 Minutes of a Committee of Finance Meeting of October
- 15 10, 2000.
- 16 (Document marked as Exhibit 8)
- for identification.)
- 18 Q. Before I ask you specifically about these
- minutes, I just want to ask you a little bit about
- 20 the general process for approving investments in the
- 21 Bond and Corporate Finance Group.
- We saw before on the Yellow Report that
- 23 there was a recommendation to the Bond Investment
- 24 Committee and then a report to the Committee on

- 1 Finance?
- 2 A. Right.
- 3 Q. Is the standard procedure at John Hancock
- 4 for an investment to be recommended by the Bond
- 5 Investment Committee and then brought to the
- 6 Committee on Finance?
- 7 ATTY. ZWICKER: What period are we
- 8 talking about?
- 9 ATTY. LORENZINI: In 2000.
- 10 Q. I'm going to strike the question. Let me
- 11 ask it in a more open-ended way. What was the
- general process, as of 2000, for an approval of an
- 13 investment by John Hancock?
- A. Well, the Committee of Finance had delegated
- a certain amount of authority to the Bond Investment
- 16 Committee for approving transactions, so most of the
- transactions that we did were approved by the Bond
- 18 Committee.
- 19 If the transaction exceeded in size, or
- was below a certain credit ratings for the size
- 21 involved, it would have to go to the Committee of
- Finance for approval, and I don't recall the exact
- 23 numbers of authority for various sizes, but they
- were large enough so most of our transactions got

- 1 approved at the Bond Committee, and then they were
- 2 just reported back to the Committee of Finance for
- 3 information.
- 4 Q. For information or approval?
- A. For information. Most were for information;
- 6 some were for approval.
- 7 Q. If they exceeded the size threshold or the
- 8 risk was too high?
- 9 A. Yes.
- 10 Q. Was there a document that existed around
- 11 that time period of 2000 listing those thresholds at
- 12 which an investment would have to be approved by the
- 13 Finance Committee?
- 14 A. There was.
- 15 Q. What was that document titled?
- 16 A. I don't recall.
- 17 Q. Can you describe it to me? Was it a
- 18 memorandum?
- 19 A. It would have been a vote by the Committee
- 20 of Finance authorizing certain --
- Q. So the thresholds would be selected in the
- 22 Minutes of the Committee on Finance meeting?
- 23 A. Yes.
- Q. Approximately when would the Committee of

- 1 Finance have taken that vote?
- 2 A. I don't recall when. They would change them
- 3 periodically.
- 4 Q. Taking a look back at the Committee on
- 5 Finance Minutes. Do you recognize this document?
- A. No, I don't recognize it.
- 7 Q. Do you recognize the form of the document?
- 8 A. Yes.
- 9 Q. Is it the standard form for Minutes of the
- 10 Committee on Finance?
- 11 A. Right.
- 12 Q. I should say Committee of Finance; is that
- the proper name?
- 14 A. Yes.
- 15 Q. Did you serve on the Committee of Finance?
- 16 A. No.
- 17 Q. Why don't you take a look at the last page
- of this document. It lists Also Attend, and it has
- 19 a number of attendees?
- A. Right.
- Q. Including Nastou?
- 22 A. Right.
- Q. Does that refresh your recollection of
- 24 whether you attended a Committee of Finance meeting

# **PART 10**

- 1 on October 10, 2000?
- 2 A. Right. I was there.
- 3 ATTY. ZWICKER: He is asking you a
- 4 different question. He is asking does it refresh
- 5 your recollection of actually being there.
- 6 Does seeing your name on the document
- 7 trigger a memory on your part that you were present
- 8 at a meeting of the Committee of Finance?
- 9 THE WITNESS: Well, I remember being
- present at a meeting; I couldn't give any of the
- 11 details of the meeting.
- Q. Just to clarify, you remember being present
- at a Committee of Finance meeting at which the
- 14 Abbott transaction was approved?
- 15 A. Right. That's right.
- 16 Q. But you don't remember any details of that
- 17 meeting?
- 18 A. No.
- 19 Q. If you look at the Minutes, the second
- 20 paragraph, it's below the redacted stamp, it states,
- 21 The Bond and Corporate Finance Group materials were
- 22 present by Roger Nastou?
- 23 A. Yes.
- Q. Do you recall presenting materials at a

- 1 ATTY. ZWICKER: Are you making an
- 2 assumption, or are you -- you are basing your answer
- 3 on practice?
- 4 Q. I'm asking if that helps refresh your
- 5 recollection.
- 6 A. Well, it doesn't. I was answering based on
- 7 practice.
- 8 Q. So based on practice, your typical practice
- 9 would be if a transaction needed to be approved by
- the Committee of Finance, you would present a Yellow
- 11 Report on that transaction to the committee?
- 12 A. Yes.
- 13 Q. Was it always you who made those
- 14 presentations?
- 15 A. No.
- 16 Q. Who else made those presentations?
- 17 A. It could be me making the whole presentation
- on a relatively straightforward transaction, or if
- 19 it were more complex, it would be me with a brief
- 20 overview and the analyst making a more detailed
- 21 presentation.
- Q. And so in the case of the Abbott transaction
- 23 was there anyone other than you who was involved in
- the presentation to the Committee of Finance?

- 1 A. Steve Blewitt was involved.
- 2 Q. And did you provide a general overview,
- 3 followed by a more detailed presentation by Steve
- 4 Blewitt, only if you recall; I don't want
- 5 speculation?
- 6 A. I don't recall exactly.
- 7 Q. Could you take a look at the second to last
- 8 sentence of the first page of these Minutes. It
- 9 states, A report of Bond and Corporate Finance Group
- 10 Investments and Available Capacity in below
- 11 AA-Country investments was submitted?
- 12 A. Right.
- 13 Q. What is a Report of Bond and Corporate
- 14 Finance Group Investments and Available Capacity in
- 15 below AA Country Investments?
- 16 A. Well, generally speaking, we had limits that
- 17 the Committee of Finance had stated we would stay
- 18 within, and this was a report of where we were
- 19 relative to those limits on various kinds of
- 20 investments.
- Q. So there was a limit on the total amount of
- 22 money invested in securities and bonds with below AA
- 23 rating?
- A. And below AA Country Investments, there

- 1 Q. Can you explain what the particular product
- 2 lines are that are referenced by these acronyms?
- 3 A. I used to be able to. I can tell you that
- 4 GBSA is the one where we would issue guaranteed
- 5 investment contracts under that product for employee
- 6 savings plans.
- 7 Q. Any others on the list that you recognize?
- 8 A. Well, PENPAR is a certain kind of pension
- 9 product, LOLA is a structured annuity product,
- 10 structured settlement product, I should say. I
- 11 think that RETLTC is a long-term care product. BOLI
- 12 means --
- 13 (Court Reporter asks for clarification.)
- 14 A. Scratch that. I'm not sure what that is.
- 15 GBRE, I don't know what that is. IQA is fixed rate
- 16 annuities, short-term, fixed rate annuities, and
- 17 then various other insurance products.
- Q. You mentioned before that John Hancock
- 19 didn't have any minimum required expected return on
- 20 investment for a particular investment, as long as
- 21 the overall goals of the company were met based on a
- 22 combination of investments. Without speculating at
- all, is there any expected return on investment
- 24 associated with the Abbott transaction that would

## PART 11

- 1 have caused John Hancock not to enter into the
- 2 investment?
- 3 ATTY. ZWICKER: Objection.
- 4 Q. Let me clarify. Is it possible to say
- 5 today, looking back at 2000, that if the expected
- 6 rate of return on the Abbott transaction had been
- 7 below some level that John Hancock wouldn't have
- 8 made the investment?
- 9 ATTY. ZWICKER: Objection. Calls for
- 10 speculation, lacks foundation. You can answer if
- 11 you can.
- 12 Q. Only if you can answer without speculating.
- A. Well, if we had expected a low return on the
- thing, lower than anything else for the risk, we
- 15 would have not invested in it.
- Q. But that would be relative to -- it would be
- 17 considered relative to all your investments at the
- 18 time?
- A. Right. That's correct.
- Q. Just to clarify, so there wouldn't be any
- absolute floor, or absolute threshold, for expected
- 22 rate of return?
- 23 ATTY. ZWICKER: Objection.
- 24 A. Absolute floor for the expected return?

- 1 Q. Right.
- 2 ATTY. ZWICKER: Are we talking about the
- 3 Abbott investment now, or other investments, or...
- 4 ATTY. LORENZINI: The Abbott investment.
- A. No, there wouldn't have been an absolute
- floor, but if we could have found comparable
- 7 investments that had a higher return and been able
- 8 to invest the money that we had available in that
- 9 kind of category, then we wouldn't have made this
- 10 investment.
- 11 Q. So it would have depended upon a comparison
- of your other investment alternatives?
- 13 A. Yes.
- 14 Q. Were you involved at all in the negotiation
- 15 of the Research Funding Agreement between Abbott and
- 16 John Hancock?
- 17 A. Involved in the negotiation between Hancock
- 18 and --
- 19 Q. Yes.
- 20 A. Like was I talking to Hancock people, or in
- 21 the room with them, or --
- 22 Q. Correct.
- 23 A. No.
- Q. Did you ever see any drafts of the contract

- 1 Hancock?
- 2 A. He is not.
- 3 Q. Do you know where he works now?
- 4 A. No.
- 5 Q. Do you know where he lives?
- 6 A. No.
- 7 Q. Did John Mastromarino come to John Hancock
- 8 after John Hancock became a subsidiary of Manulife?
- 9 A. Before. I think he left the Hancock when it
- 10 became a subsidiary of Manulife.
- Q. Did there come a time when John Mastromarino
- 12 raised questions regarding the Abbott investment?
- A. I remember him voicing an opinion, negative
- opinion, on the investment. This was after the
- 15 investment was already committed to.
- Q. Do you recall approximately how long after
- the contract had been executed that he voiced that
- 18 negative opinion?
- 19 A. No.
- Q. And was this something he expressed directly
- 21 to you?
- A. He expressed it in a meeting, in an open
- 23 meeting, and I was present at the meeting.
- Q. Was it a meeting of a particular committee?

- A. It might have been the Bond Investment
- 2 Committee.
- Q. Do you recall who else was at the meeting
- 4 other than you?
- 5 A. No.
- 6 Q. Do you recall what he said about the Abbott
- 7 investment at that time?
- 8 A. No.
- 9 Q. Just generally negative?
- 10 A. Right.
- 11 Q. Did he think the investment was too risky?
- 12 A. I don't remember that.
- 13 ATTY. LORENZINI: I'm going to mark as
- 14 Exhibit Nastou 10 a document stamped JH002447, which
- 15 appears to be an e-mail. The top e-mail is from
- 16 Barry Welch to Steve Blewitt with a cc: to Roger
- 17 Nastou, and then there is a previous e-mail from
- 18 John Mastromarino.
- 19 (Document marked as Exhibit 10
- 20 for identification.)
- Q. Why don't you take just a moment to look
- 22 over this and see if you recall it.
- A. When was this written? March 14, 2003.
- 24 ATTY. ZWICKER: That's the date on the

# **PART 12**

- 1 document.
- Q. Do you recognize the e-mail?
- 3 A. No.
- 4 Q. Was -- strike that. Do you recall that John
- 5 Mastromarino raised concerns about the Abbott
- 6 investment around March of 2003?
- A. I don't remember the date. It could have
- 8 been around then, but I don't remember the date.
- 9 Q. If you look at his first e-mail, he says, I
- 10 read the write-up on the 220MM last night, and you
- 11 are one of recipients of this e-mail, it appears.
- 12 Do you know what he is referring to by "the write-up
- 13 on the 220 million?
- 14 A. I don't know. I could guess.
- 15 ATTY. ZWICKER: Don't guess.
- Q. Don't guess, but is he referring to the
- 17 Yellow Report authored by Steve Blewitt regarding
- 18 the Abbott transaction?
- 19 ATTY. ZWICKER: Asked and answered.
- 20 A. I don't know.
- Q. If you look at the next sentence, Mr.
- 22 Mastromarino says, I must say it is a bit too rich
- 23 for my taste with too many assumptions and
- 24 unknowns...

- 1 ATTY. LORENZINI: Go ahead.
- 2 THE COURT REPORTER: There is a lot of
- 3 colloquy.
- 4 (Question read.)
- 5 ATTY. ZWICKER: So he is standing on the
- 6 question. Can you answer it?
- 7 ATTY. LORENZINI: Let me move on. I'm
- 8 going to phrase it differently.
- Q. Did Mr. Mastromarino ever express to you any
- 10 concerns about the strength of John Hancock's
- 11 analysis of investments, the strength or quality of
- 12 its analysis of investments?
- 13 A. No, not that I recall.
- 14 THE WITNESS: Is it okay for me to give
- 15 him a little context here?
- 16 ATTY. ZWICKER: No.
- 17 THE WITNESS: No? Okay.
- 18 Q. Let me just ask you, Did Mr. Mastromarino
- 19 have any suggestions about changing the way that
- 20 John Hancock evaluated risks of investments?
- 21 ATTY. ZWICKER: Objection. Vague.
- 22 A. I don't recall.
- Q. Did you have the sense that -- forget about
- the sense, but did Mr. Mastromarino ever express to

- 1 you a desire to get John Hancock out of the contract
- 2 with Abbott?
- 3 A. I don't remember him ever saying that.
- 4 Q. Do you recall at any point anyone at John
- 5 Hancock raising the issue of whether Abbott had
- 6 breached its agreement with John Hancock?
- 7 ATTY. ZWICKER: Excluding any
- 8 conversations you had with lawyers.
- 9 ATTY. LORENZINI: Correct.
- 10 ATTY. ZWICKER: Or information given to
- 11 you by lawyers through someone else.
- A. I have a vague recollection of Steve Blewitt
- mentioning that to me, but I don't -- that's all it
- 14 is, is a vague recollection.
- Q. Do you have any recollection of the time
- frame of that statement compared to this March 14,
- 17 2003 e-mail with John Mastromarino?
- A. No. I think it would have been after that,
- 19 but --
- 20 ATTY. ZWICKER: Don't guess.
- Q. Do you recall it was after John Mastromarino
- 22 raised issues concerning the risks associated with
- 23 the Abbott investments that John Hancock first began
- 24 discussing the possibility of claims against Abbott?

### **Deposition Exhibit 1**

#### **Proposed Summary of Terms** 3/7/00

For 9:30 AM 4/14/00 W/ RGP

esearcher:

Abbott Laboratories ("Abbott")

unding Source:

John Hancock Life Insurance Company ("John Hancock")

se of Proceeds:

Fund research and development programs associated with Program Compounds.

rogram 'ompounds: A minimum of six independent phase II (or later stage) compounds that have been mutually agreed upon, and selected earlier-stage cancer compounds, and any line extensions, new formulations and combination products in which the same active ingredient is present.

rogram ayments: During the Program Term, and in consideration of Abbott's continuing performance of the research services under the Research Plan, John Hancock shall make program payments to Abbott in the installments and on the dates set forth below:

Date	Payment		
[May 1,] 2000	\$50,000,000		
[May 1,] 2001	\$50,000,000		
[May 1,] 2002	\$50,000,000		
[May 1,] 2003	\$50,000,000		

"Program Tenn" means the period commencing [May 1,] 2000 Date and ending on [April 30,] 2003.

"Research Plan" means a detailed statement of Abbott's objectives, activities, timetable, FTE allocation and budget for the Program Compounds during the Program Term.

During the Program Term, Abbott agrees to spend a minimum of \$100 million per year on research and development programs associated with the Program Compounds

If Abbott ceases research and development of all Program Compounds or Abbott does not spend at least [\$] million in a year on the research and development of Program Compounds, John Hancock's obligation to continue to make Program Payments shall cease.

CONFIDENTIAL JH 002308

Milestone Payments:

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Abbott shall make a milestone payment in the amount of [\$10 million] for each Compound that receives Regulatory Approval. Payment will be made at the time of Regulatory Approval.

Royalty Payments: Abbott shall pay to John Hancock royalties on Net Sales of Program Compounds at the following rates:

Annual Sales Volume	Royalty Rate
0 to [\$400] million > [\$ 400] million and ≤ [\$1,000] million > [\$1,000] million	[ 8%] [ 4%] [ 1%]

The obligation to make royalty payments shall commence on the date of the First Commercial Sale of a Program Compound [in a given country] and shall continue with respect to Net Sales of such Program Compound [sold in such country] for a period of [10] years.

Development, Manufacturing, And Marketing Agreements:

Abbott shall be solely responsible for, and agrees to use reasonable commercial efforts to pursue, the clinical development, government approval, manufacturing, marketing and sales of the Program Compounds.

#### John Hancock - Abbott Laboratories Research and Development Transaction Investment Analysis

1. John Hancock is considering committing [\$50 million] per year for a period of four years to fund the development and commercialization of a specified pool of compounds owned by Abbott. During the four year period, Abbott will commit three-to-four times John Hancock's investment for those compounds, and will spend over seven times our investment during the term of the transaction. In return, Abbott will agree to pay John Hancock milestone and royalty payments for each compound that reaches regulatory approval and has commercial sales.

This transaction is valuable to Abbott because it allows them to offset R&D expenditures with research and development income – improving their net income. This transaction is valuable to John Hancock because it allows us to generate equity returns in the form of current (royalty) income for a sizeable investment.

- 2. Determining the fair economics of the proposed transaction is highly dependent upon the number of compounds included, the characteristics of the compounds (i.e. status of development, potential sales), the structure of the royalty rates, and an estimation of what is a fair return. To help us answer these questions, we have taken several steps. First, we have researched industry standards for likelihood of success and probable sales curves for compounds in different stages of development. Second, we have developed a spreadsheet model that calculates the rate of return for a chosen portfolio and have developed a minimum number of compounds and associated milestone/royalty payments to provide us with returns that minimum number of compounds and associated milestone/royalty payments to provide us with returns that adequately compensate us for the risk we are taking. Third, we have tried to determine what rate of return the capital markets would require for the level of risk that we are willing to take.
- 3. The current portfolio of compounds that we are considering consists of most of Abbott's late-stage development compounds and a basket of pre-clinical cancer compounds. The late-stage compounds range from mid-Phase II to starting phase-III. Peak sales for these compounds range from \$400 million to \$1.2 billion. With the exception of the "cancer basket", the compounds are independent of each other. We have be not completed any diligence on the specific compounds yet other than to read Abbott's press releases and analyst reports. Assuming that Abbott has correctly characterized the development stage of each compound, we have assigned probabilities of success ("regulatory approval") and time to success for each compound. Our probabilities of success come from a 1995 study by Dr. Joseph A. DiMasi at the Tufts compound. Our probabilities of success come from a 1995 study is generally accepted by the Center for the Study of Drug Development. Dr. DiMasi's study is generally accepted by the pharmaceutical industry as an accurate assessment of the time and costs associated with drug development. Dr. DiMasi looked at a random sample of 93 compounds in four broad disease categories from 12 pharmaceutical companies that were first tested in humans between 1970 and 1982.

Dr. DiMasi's results are summarized below:

		Probab	Probability of Success		All
	NSAID	Cardio-	Anti-infective	Neuro-pharm	A.,
Entering Phase	NOPEL	vascular	2004	20%	23%
riase	22%	26%	30%	22%	31%
· · · · · · · · · · · · · · · · · · ·	30%	72%	77%	51%	63%

Dr. DiMasi calculated the average time to approval as 8.75 years for compounds entering Phase I, 7.5 years for compounds entering Phase III. Embedded in these for compounds entering Phase III. Embedded in these times was an approximately 30-month review process by the FDA. Due to legislative and process changes, times was an approximately 30-month review process by the FDA. A revised timeframe for approval (which the average FDA review time is now approximately 12 months. A revised timeframe for approval (which was been published by TCSDD in 1999), based on accelerated review by the FDA, and quicker processes within the pharmaceutical companies, is 6.0 years for Phase I, 5.0 years for Phase II, and 3.0 years for Phase III.

- In estimating sales projections by compound, we start with expected peak sales for the compound. For now, we have accepted Abbott's number for peak sales. In our diligence process, however, we will look at sales for similar compounds, the relative success of first-to-market drugs versus others, and other factors. Our next step is to use a Sales Curve calculated by Lehman Brothers that projects ramp-up and ramp-down for sizeable drugs. In general, this Curve shows peak sales being reached seven years after launch. Ramp-up is achieved by 5% of peak sales in the first year, followed by 13%, 25%, 50%, 80%, and 90%. Peak sales are maintained for three years, and the compound then achieves 85% of peak, 75%, 70%, etc. As expected, every compound has its own unique curve, and Lehman's is only a general estimate. We have compared the curve to IMS data of prescription sales for individual compounds in a number of drug classes from 1981 to 1999. Our analysis indicates that Lehman's curve is a good fit.
- We developed a spreadsheet that incorporates multiple drug compounds (and their specific probability of success, time to launch, and expected sales pattern) and a milestone/royalty structure that is intended to lower our risk in the transaction. Having multiple compounds that are substantially far along in clinical trial, we limit our exposure to the possibility that no compound is approved and that we lose all of our money. Based on the current proposed portfolio, we believe that the risk of losing all of our money is approximately 1%. The second component of our model is to receive a milestone payment from Abbott upon regulatory approval. We have proposed \$10 million per compound. This payment is intended to return cash to John Hancock sooner and to somewhat lower the risk that actual sales do not meet projected sales. The third component of our model is to have a tiered royalty structure - such as 8% of the first \$400 million of aggregate sales, 4% of the next \$600 million of aggregate sales, and 1% of aggregate sales in excess of \$1 billion.
- The last step of our analysis is to determine what a fair economic return for this transaction should be. We have benchmarked this transactions in a number of ways, such as: R&D vehicles for pre-clinical 6. ' compounds were sold with expected IRRs (over a three-to-five year period) of approximately 40%; Hambrecht & Quist has estimated pharmaceutical IRRs for single phase-II compounds to be 40% and single phase-III compounds to be 25%; the Palisade Partners transaction has an expected IRR of 20%; Elan Pharmaceuticals in currently in the market with a pooled transaction with an IRR of 25% (over 18-24 months); and our proprietary analysis of the equity market's IRR for Abbott's entire R&D pipeline of 16-22%. Based on these comparisions, we think that an IRR of 20-25% is reasonable - and Abbott agrees.
- The current proposed portfolio consists of (1) a mid Phase II compound with projected peak sales of \$700 million, (2) a late Phase II with peak sales of \$1.2 billion, (3) an early Phase III with peak sales of \$700 million, (4) an early Phase III with peak sales of \$700 million, (5) an early Phase II with peak sales of \$400 million - this compound may be removed if certain milestones are met, and (6) a basket of four cancer compounds currently in pre-clinical trials, each of which may have peak sales of \$400 million.

John Hancock will fund [\$50 million] per year for four years. Milestone payments of \$10 million will be paid for each compound that receives regulatory approval. Royalty rates will equal 8% on the first \$400 million in sales, 4% on the next \$600 million of sales, and 1% on sales in excess of \$1 billion. Abbott would also like to build in a provision to limit royalties if our actual IRR exceeds a certain amount.

Based on this portfolio, and running our model 500 times, the probability of losing all of our money is between 0.5% and 1.5%. The average return is approximately 20% and tightly bound around that percentage. The maximum return is 25%. Looking at sensitivities to our assumptions, if the \$1.2 billion compound generated only \$600 million in revenues or if all compounds generated only 75% of projected sales, our IRR would be reduced by approximately 1-2%. Our probability of failure would not change.

# **Deposition Exhibit 2**

John Hancock Financial Services, Inc.

Bond and Corporate Finance Group

John Hancock Place Post Office Box 111 Boston, Massachusetts 02117 (617) 572-9624 Fax: (617) 572-1628 E-mail: sblewitt@jhancock.com

Stephen J. Blewitt Managing Director

May 8, 2000

Memorandum To:

Messrs. Aborn, Brown, D'Alessandro, DeCiccio, Hartz, Nastou

R.e:

Proposed John Hancock - Abbott Laboratories Transaction

The attached material is for our meeting on Thursday, May 11th at 2PM.

Stew Blentt

# John Hancock - Abbott Laboratories Research and Development Transaction

## Investment Analysis

1. John Hancock is considering committing [\$50 million] per year for a period of four years to fund the development and commercialization of a specified pool of compounds owned by Abbott Laboratories. During the four year period, Abbott will commit three-to-four times John Hancock's investment for those compounds, and will spend over seven times our investment during the term of the transaction. In return, Abbott will agree to pay John Hancock milestone and royalty payments for each compound that reaches regulatory approval and has commercial sales,

This transaction is valuable to Abbott because it allows them to offset R&D expenditures with research and development income – improving their net income. This transaction is valuable to John Hancock because it allows us to generate equity returns in the form of current (royalty) income for a sizeable investment.

Abbott Laboratories is the eight largest pharmaceutical company in the U.S. Its revenues were approximately \$13 billion in 1999 and its current market capitalization is approximately \$60 billion. Abbott is rated "Aaa" by the major rating agencies.

Our business relationship with Abbott began in 1997 when we funded a \$30 million equity investment in a development stage company called Metabolex and received the right to sell our equity to Abbott at a slight premium. Since then, Abbott has introduced us to a number of other proprietary investment opportunities and we have completed one (Idun).

- 2. Determining the fair economics of the proposed transaction is highly dependent upon the number of compounds included, the characteristics of the compounds (i.e. status of development, potential sales), the structure of the royalty rates, and an estimation of what is a fair return. To help us answer these questions, we have taken several steps. First, we have researched industry standards for likelihood of success and probable sales curves for compounds in different stages of development. Second, we have developed a spreadsheet model that calculates the rate of return for a chosen portfolio and have developed a minimum number of compounds and associated milestone/royalty payments to provide us with returns that adequately compensate us for the risk we are taking. Third, we have tried to determine what rate of return the capital markets would require for the level of risk that we are willing to take.
- 3. The current portfolio of compounds that we are considering consists of five of Abbott's late-stage development compounds and a basket of three pre-clinical cancer compounds. The late-stage compounds range from mid-Phase II to starting Phase-III. Peak annual sales for these compounds range from \$400 million to \$1.2 billion. With the exception of the "cancer basket", the compounds are independent of each other. We have not completed any diligence on the specific compounds yet other than to read Abbott's press releases and analyst reports. Assuming that Abbott has correctly characterized the development stage of each compound, we have assigned probabilities of success ("regulatory approval") and time to success for each compound. Our probabilities of success come from a 1995 study by Dr. Joseph A. DiMasi at the Tufts Center for the Study of Drug Development. Dr. DiMasi's study is generally accepted by the pharmaceutical industry as an accurate assessment of the probability of success and of the time and costs associated with drug development. Dr. DiMasi looked at a random sample of 93

compounds in four broad disease categories from 12 pharmaceutical companies that were first tested in humans between 1970 and 1982.

Dr. DiMasi's results are summarized below	Dτ	DiMasi's	results are	summarized	below
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		Probab	ility of Success		
Entering Phase	NSAID	Cardio- vascular	Anti-infective	Neuro-pharm	All
I	22%	26%	30%	20%	23%
П	30%	41%	38%	22%	31%
Ш	71%	72%	77%	51%	63%

Dr. DiMasi calculated the average time to approval as 8.75 years for compounds entering Phase I, 7.5 years for compounds entering Phase II, and 5.5 years for compounds entering Phase III. Embedded in these times was an approximately 30-month review process by the FDA. Due to legislative and process changes, the average FDA review time is now approximately 12 months. A revised timeframe for approval (which was been published by TCSDD in 1999), based on accelerated review by the FDA, and quicker processes within the pharmaceutical companies, is 6.0 years for Phase I, 5.0 years for Phase II, and 3.0 years for Phase III.

During the past four years, we have evaluated many equity investments in emerging pharmaceutical and medical device companies, and we have completed several transactions. During that period, we have established relationships with reliable scientific advisors. If we proceed beyond the current step of working with Abbott on the framework of a transaction, we will test Dr. DiMasi's model for reasonableness and we will engage scientific consultants to evaluate the compounds in the portfolio.

- 4. In estimating sales projections by compound, we start with expected peak sales for the compound. For now, we have accepted Abbott's number for peak sales. In our diligence process, however, we will look at sales for similar compounds, the relative success of first-to-market drugs versus others, and other factors. Our next step is to use a Sales Curve calculated by Lehman Brothers that projects ramp-up and ramp-down for sizeable drugs. In general, this Curve shows peak sales being reached seven years after launch. Ramp-up is achieved by 5% of peak sales in the first year, followed by 13%, 25%, 50%, 80%, and 90%. Peak sales are maintained for three years, and the compound then achieves 85% of peak, 75%, 70%, etc. As expected, every compound has its own unique curve, and Lehman's is only a general estimate. We have compared the curve to IMS data of prescription sales for individual compounds in a number of drug classes from 1981 to 1999. Our analysis indicates that Lehman's curve is a good fit.
- 5. We developed a spreadsheet that incorporates multiple drug compounds (and their specific probability of success, time to launch, and expected sales pattern) and a milestone/royalty structure that is intended to lower our risk in the transaction. Having multiple compounds that are substantially far along in clinical trial, we limit our exposure to the possibility that no compound is approved and that we lose all of our money. Based on the current proposed portfolio, we believe that the risk of losing all of our money is approximately 1%. The second component of our model is to receive a milestone payment from Abbott upon regulatory approval. We have proposed \$10 million per compound. This payment is intended to return cash to John Hancock sooner and to somewhat lower the risk that actual sales do not meet projected sales. The third component of our model is to have a tiered royalty structure such as 8% of the first \$400 million of aggregate annual sales, 4% of the next \$600 million of aggregate annual sales, and 1% of aggregate annual sales in excess of \$1 billion.

The last step of our analysis is to determine what a fair economic return for this transaction should be. We have benchmarked this transactions in a number of ways, such as: R&D vehicles for pre-clinical compounds were sold with expected IRRs (over a three-to-five year period) of approximately 40%; Hambrecht & Quist has estimated pharmaceutical IRRs for single phase-II compounds to be 40% and single phase-III compounds to be 25%; the Palisade Partners (Sony movies) transaction that we participated in last year has an expected IRR of 20%; Elan Pharmaceuticals in currently in the market with a pooled transaction with an IRR of 25% (over 18-24 months); and our proprietary analysis of the equity market's IRR for Abbott's entire R&D pipeline of 16-22%. Based on these comparisons, we think that an IRR of 20-25% is reasonable - and Abbott agrees.

We also evaluated the relationship between our investment (and Abbott's) in the entire portfolio and the average royalty rate that we expect to receive - which is approximately 4-5%. We estimate that the current value of the compounds that Abbott is contributing to the transaction is about \$1 billion. During the four year investment period, Abbott expects to invest \$800 million on the compounds, in addition to our \$200 million. Based on these amounts, our investment is approximately 10% of the total invested dollars. Most pharmaceutical companies earn about a 50% pre-tax margin (excluding R&D expenses) on sales. On a net basis, then, our expected royalty should be about 5%.

The current proposed portfolio consists of (1) a mid Phase II compound with projected peak sales of \$700 million, (2) a late Phase II with peak sales of \$1.2 billion, (3) an early Phase III with peak sales of \$700 million, (4) an early Phase III with peak sales of \$700 million, (5) an early Phase II with peak sales of \$400 million, and (6) a basket of three cancer compounds currently in pre-clinical trials, each of which may have peak sales of \$400 million.

John Hancock will fund [\$50 million] per year for four years. Milestone payments of \$10 million will be paid for each compound that receives regulatory approval. Royalty rates will equal [8%] on the first \$400 million in sales, [4%] on the next \$600 million of sales, and [1%] on sales in excess of \$1 billion. Abbott would also like to build in a provision to limit royalties if our actual IRR exceeds a certain amount.

Based on this portfolio, and running our model 500 times, the probability of losing all of our money is about 1%. There is also about a 1% probability of just getting our money back (with no return). The average return is approximately 20% and tightly bound around that percentage. The maximum return is 25%. Looking at sensitivities to our assumptions, if the \$1.2 billion compound generated only \$600 million in revenues or if all compounds generated only 75% of projected sales, our IRR would be reduced by approximately 1-2%. Our probability of failure would not change.

It is important to note that the expected IRRs are over a long period of time (10-15 years). Assuming that we could sell our future royalty stream after the fifth year, our five-year IRR would be about 24% (and the maximum return would be about 35%).

A one-percent probability of total loss combined with a one-percent chance of not earning a return is approximately equivalent to a 30 basis point annual loss over five years - or a "Baa" credit rating. The expected return of 20% is attractive relative to the risk that we would be

# Estimated Cash Flow (\$ millions)

Year	JH Cash	Milestone	Royalty	Aggregate	<u>IH</u>
1 cai	Payments	Payments	Payments	Cash Received	Net Cash Flow
2000	(50)				(50)
2001	(50)				(50)
2002	(50)		6	6	(44)
2003	(50)		18	18 ·	(32)
2004	\ <u>\</u>	30	35	65	65
2005	1		48	48	48
2006			58	58	58
2007			62	62	62
2008			65	65	65
2009			65	65	65
2010			66	66	66
2011			64	64	64
2012	+	<del> </del>	61	61	61
2013	+	<del> </del>	32	32	32
2014	-	<del></del>	14	14	14
TOTAL	(200)	30	594	624	424

## Accounting Structure

# Anticipated Structure:

We would establish a trust to make the investment and issue one series of certificates backed by the royalty cash flows. Rating agency would rate the certificate to a minimum return (approximately 8 - 10%). In early years, when no cash flow is available, bond would accrete at this minimum return. When cash flow is available it first pays the current period return, then the accreted return, then pays down the bond. If certain targets are hit, some cash flow beyond the minimum return can be designated as excess interest and booked as income.

Balance sheet treatment: Bond, with an NAIC 2 or NAIC 3 rating. This requires we get a rating agency to rate the bond.

Income treatment: Current, fixed return of minimum rated yield. If deal is successful, excess income in later years.

**Downside scenario:** If the program is performing poorly, bond will be downgraded and ultimately rated category 6. Bond will be written down each period as necessary to reflect drop in value. This will spread the loss over several years and many quarters.

## Issues:

reputable rating agency.

- 1) Can this be considered a bond?

  Many royalty streams have been securitized in this fashion. The David Bowie bond (bought by Prudential Insurance) is the most visible example, but other musical groups have sold off royalties in bond form and a drug royalty deal is currently being marketed. The SVO will consider it an Asset Backed Security if we get it rated by a
- 2) Can we accrete income during the first few years when no cash flow is available? There are plenty of examples of accreting bonds. Corporate bonds can be issued on a zero coupon or pay-in-kind (PIK) basis. In the asset-backed arena, principal only strips allow accretion of income. A recent deal backed by film revenues was rated by Duff & Phelps to a minimum yield. This should allow the accretion of income.

## Alternative Structure:

If we either cannot get a rating agency comfortable rating this bond or E&Y will not buy off on the structure, we can create a RACERS trust. Our accountants and E&Y do agree that a RACERS structure meets the accounting rules (we spent lots of time exploring the possibility of placing our volatile BA assets in a RACERS trust), with the provision that a 3% equity portion be sold to a third party.. The idea behind a RACERS is to put a zero coupon bond and the contemplated investment in a trust. The zero coupon bond ensures the trust certificate can be rated by the SVO and hence booked as a bond. The RACERS would use structured note accounting, which requires all cash flow be booked as income. We'd create cash flow, and hence income, in the early years by including cash in the trust that can be distributed, according to preset rules, as income. We can dampen the volatility of the income in the later years by structuring a maximum coupon paid by the trust. There are several disadvantages of this structure. First, the cash and zero coupon bond drag down the economics. There are ways to mitigate this, but ultimately there is likely to be some drag. Second, structured notes can draw the attention of the rating agencies and security analysts. This could be viewed as a tool to manage earnings. While it is small relative to John Hancock's total assets, it is a large (ultimately \$200 million) transaction. Finally, we would need to find a buyer of the 3% equity. Most buyers would likely demand a very high return for this investment.

# **Deposition Exhibit 6**

JOHN HANCOCK LIFE INSURANCE COMPANY

Bond & Corporate Finance Group

Report Date:

September 21, 2000 September 21, 2000

Recommendation to B.I.C.: Report to C.O.F.:

October 10, 2000

Private

Purchase Recommendation

\$ 4 mm

\$20 mm \$110 mm GBRE GBSA OPNBLK \$ 4 mm CLDBLK \$ 30 mm PENPAR \$ 9 mm IQA \$15 mm GRPLTC \$ 4 mm LOLA \$ 8 mm GRPINS \$ 2 mm RETLTC \$ 7 mm UNIVRSL\$ 5 mm

BOLI \$ 2 mm PLI

ABBOTT LABORATORIES ("Non-Recourse")

North Chicago, IL

We are recommending a \$220 million commitment to fund research and development expenses for a basket of eight pharmaceutical products ("Program Compounds") currently under development by Abbott Laboratories ("Abbott"). The commitment will be funded over a four-year period and will be subject to Abbott Laboratories co-funding at least two times our commitment on the Program Compounds during the same period of time. In return for the research and development payments, Abbott will agree to pay John Hancock milestone and royalty payments for each Compound that reaches regulatory approval and has commercial sales. The purpose of this transaction is to allow Abbott to increase its expenditures on research and development (to generate future growth in revenues and earnings) but to maintain current earnings.

The Program Compounds are a diversified pool of eight compounds owned by Abbott Laboratories and in various stages of clinical development. The Compounds are divided between late-stage and early-stage, including three Phase III, two Phase II, one Phase I, and two pre-clinical compounds. The Compounds are well-diversified from a disease/stage perspective, although several compounds are focused on the cancer market. Even within the cancer market, though, each of the Compounds targets either different types of cancer, or different mechanisms of action. Based on their current stage of development and projected sales levels, we think that the Program Compounds have a current market value of approximately \$1 billion. During the term of the transaction, we expect Abbott to spend approximately \$1.3 billion (including John Hancock's commitment) on further research and development for the Compounds.

Through the management fee and anticipated milestone payments, we expect to generate at least an 8% return on investment during the initial four years of the transaction. The average return is approximately 17.5% over 15 years. If we assume that we could sell our future royalty stream after the fifth year, our average five-year IRR would be about 22%.

The transaction is structured to provide a one-to two percent probability of total loss combined with a oneto-two percent chance of not earning a return. This is approximately equivalent to a 60 basis point annual loss over five years - or a "Ba1" credit rating. The expected return of 17.50% is attractive relative to the risk of the transaction.

Report Authors:

Stephen J. Blewitt, Managing Director Scott Hartz, Managing Director (t:\industrials\sjb\yellows\abbott-yo3.doc)

JOHN HANCOCK LIFE INSURANCE COMPANY

Bond & Corporate Finance Group September 21, 2000

Report Date: Recommendation to B.I.C.:

September 21, 2000

Report to C.O.F.:

October 10, 2000

Private

Purchase Recommendation

\$20 mm GBSA \$110 mm GBRE OPNBLK \$ 4 mm CLDBLK \$ 30 mm PENPAR \$ 9 mm IQA \$15 mm GRPLTC \$ 4 mm \$ 8 mm LOLA GRPINS \$ 2 mm RETLTC \$ 7 mm UNIVRSL\$ 5 mm \$ 4 mm BOLI

\$ 2 mm IPLI

ISSUER:

Abbott Laboratories (Non-recourse)

ISSUE:

\$220 million Research and Development Funding Commitment

ISSUE RATING:

ЈН: Ва2

BROKER:

Direct

SIC CODE:

2830 - Drugs

USE OF PROCEEDS:

To fund the research and development of eight pharmaceutical products ("Program Compounds") owned Abbott, and to pre-fund management fees and projected milestone payments, and to pay for transaction and

administrative expenses.

STATE OF INC.:

Illinois

CIRCLE DATE:

August 31, 2000

TAKEDOWN DATE:

Upon completion of documentation

PROGRAM PAYMENTS:

During the Program Term, and in consideration of Abbott's continuing performance of the research services under the Research Plan, John Hancock shall make program payments to Abbott in the installments and on the dates set forth below:

Payment [December,] 2000 \$50,000,000 \$55,000,000 [December,] 2001 \$55,000,000 [December,] 2002 \$60,000,000 [December,] 2003

"Program Term" means the period commencing [December,] 2000 Date and ending on [December,] 2004.

"Research Plan" means a detailed statement of Abbott's objectives, activities, timetable, FTE allocation and budget for the Program Compounds during the Program Compounds during each year of the Program Term. Abbott shall provide an updated research plan on an annual basis.

### Abbott Obligations

During the Program Term, Abbott agrees to spend, in addition to the funds provided by John Hancock, (i) a minimum of \$50 million per year and (ii) a minimum of \$400 million in aggregate on research and development programs associated with the Program Compounds.

# Program Payment Termination Provisions

Unless the parties agree upon an alternative arrangement, if Abbott (a) ceases research and development of all Program Compounds or (b) does not spend at least the amount provided by John Hancock in a year on the research and development of Program Compounds or (c) does not reasonably demonstrate, in its updated research plan, its intent to spend a minimum of the amount provided by John Hancock in the next year of the Program Term or \$620 million (including the funds provided by John Hancock) in aggregate, John Hancock's obligation to continue to make Program Payments shall cease. In the case of either (a) or (b) above, Abbott will refund to John Hancock \$55 million minus half of the amount actually spent by Abbott during that year.

### Carryover Provisions

If Abbott spends the amount provided by John Hancock in a year but does not spend at least an additional \$50 million, Abbott agrees to spend the difference between \$105 million and the amount actually spent in that year (the "Carryover Amount") in the subsequent year. John Hancock's obligation to make Program Payments in the subsequent year, if any, will be deferred until that time that Abbott demonstrates that it has spent the Carryover Amount in that subsequent year.

If Abbott spends the amount provided by John Hancock in each year and at least an additional \$50 million in each year, but does not spend a minimum of \$620 million (including the funds provided by John Hancock) in aggregate on research and development programs associated with the Program Compounds during the Program Term, Abbott agrees to spend the difference between \$620 million and the aggregate amount actually spent (the "Aggregate Carryover Amount") in the subsequent year. If Abbott does not spend the Aggregate Carryover Amount in the subsequent year, Abbott will refund to John Hancock one-third of the difference between (a) \$620 million and the amount actually spent.

MANAGEMENT FEE:

Commencing with the first anniversary of the Program Term and continuing until the end of the Program Term, Abbott shall pay John Hancock a fee in the amount of \$2.0 million per year as compensation for monitoring Abbott's continuing performance of its research services under the Research Plan, the development of the Program Compounds, and to reimburse John Hancock for its ongoing fees and expenses incurred in connection with this transaction.

# MILESTONE PAYMENTS:

Abbott shall make the following payments for each compound for each milestone achieved after commencement of the Program Term:

Upon the allowance of an IND application by the FDA: \$1,000,000

Upon the initiation of a Phase I Clinical Trial: \$2,000,000 \$3,000,000

Upon the initiation of a Phase II Clinical Trial:

\$4,000,000 Upon the initiation of a Phase III Clinical Trial: \$5,000,000

Upon the filing of an NDA application with the FDA: \$10,000,000

Upon NDA Approval by the FDA:

Aggregate milestone payments paid by Abbott, for all "non-NDA Approval" milestones achieved will not exceed \$12 million. Aggregate milestone payments paid by Abbott, for all "NDA Approval" milestones achieved will not exceed \$40 million. In addition, "non-NDA Approval" milestone payments will not exceed \$3 million in the first year or \$6 million in the second year after commencement of the Program Term.

# ROYALTY PAYMENTS:

Abbott shall pay to John Hancock royalties on aggregate worldwide Net Sales of Program Compounds (all Program Compound sales combined) at the following rates:

Annualized Net Sales of Aggregate Program Compounds	Royalty Rate
\$0 to \$400 million	8%
>\$400 million and ≤ \$1,000 million	4%
>\$1,000 million and $\leq$ \$2,000 million	1%
>\$2,000 million	1/2%

The obligation to make royalty payments shall commence on the date of the First Commercial Sale of a Program Compound and shall continue with respect to Net Sales of such Program Compound for a period of ten years. Not withstanding the foregoing, the obligation to make royalty payments on all Program Compounds shall not begin until after the second anniversary of the Program Term and shall cease at December 31, 2014.

# HANCOCK HOLDINGS:

# RELATED HOLDINGS:

\$29,000,000 Preferred Stock of Metabolex Corporation with Put Rights

to Abbott

#### ANALYST:

Stephen J. Blewitt

#### HOUSE COUNSEL:

Amy Weed

## SPECIAL COUNSEL:

Choate, Hall & Stewart

### Report Authors:

Stephen J. Blewitt, Managing Director Scott Hartz, Managing Director (t:\industrials\sjb\yellows\abbott-yo3.doc)

TRANSACTION OVERVIEW In December 1999, John Hancock approached Abbott Laboratories, Inc. ("Abbott") with a financial structure that would allow Abbott to increase its research and development expenditures (to generate future growth in revenues and earnings) but maintain current earnings. The structure, which is presented in this investment recommendation, uses probability analysis on a diversified portfolio of drug compounds, supplemented by scientific due diligence, to achieve an investment grade or near investment grade risk for John Hancock and allow us to generate equity returns in the form of current (royalty) income for a sizeable investment.

This transaction requires John Hancock to commit to funding an average of \$55 million per year for a period of four years to fund the research and development of a diversified pool of eight compounds ("Program Compounds") owned by Abbott Laboratories. We have valued the Program Compounds today at approximately \$1 billion (or five times our investment) and we expect Abbott to spend over seven times our investment during the term of the transaction (during the initial four year period, Abbott will commit two times John Hancock's investment for those compounds). In return for the research and development payments, Abbott will agree to pay John Hancock milestone and royalty payments for each compound that reaches regulatory approval and has commercial sales as well as a management fee.

Through the management fee and anticipated milestone payments, we expect to generate at least an 8% return on investment during the initial four years of the transaction... The average return is approximately 17.5% over 15 years. If we assume that we could sell our future royalty stream after the fifth year, our average five-year IRR would be about 22%.

This transaction is consistent with our approach to investing in the pharmaceutical sector. During the past five years, we have invested approximately \$460 million in pharmaceutical companies. Approximately \$300 million is invested in straight debt for investment grade companies. The remaining \$160 million is invested in equity-oriented transactions where we think that there are opportunities for exceptional value. Although we have invested in a couple of straight equity transactions, approximately \$150 million of the \$160 million is invested in transactions where our downside risk is protected by either "put rights" to investment grade companies (Metabolex, Nexell), senior note positions (Celgene, Cubist), or structured portfolios of drug candidates (Pharma Marketing). In these transactions, we maintain sizable up-side potential but reduce the probability of losing all of our invested capital through the structure of our investment.

In summary, we think that the structure of this transaction, which has us co-investing with Abbott Laboratories in a diversified pool of their drug compounds, which we believe have a current value of approximately \$1 billion, over a four year period, during which time Abbott has to meet co-investment obligations and the drug compounds need to continue to progress in development, allows us to generate substantial current income that exceeds the risk associated with the transaction. Although we are committing to a substantial \$220 million investment, our expectation is that our net investment will not exceed \$176 million (due to management fees, milestone payments, and royalty payments).

The transaction is structured to provide a one-to-two percent probability of total loss combined with a oneto-two percent chance of not earning a return. This is approximately equivalent to a 60 basis point annual loss over five years - or a "Bal" credit rating. The expected return of 17.50% is attractive relative to the risk of the transaction.

## Expected accounting treatment

There have been a number of royalty streams sold off in the form of an asset backed security. The most visible example is the David Bowie bond bought by Prudential Insurance. While this royalty transaction has many similar features, it is also different in that it is funded over a four year period and no royalties are currently being generated. We believe that at the end of the funding period we will be able to obtain a rating on the transaction that will allow it to be placed on our bond schedule. In the meantime, it will appear on our BA schedule. We plan to account for this investment using the guidance in ruling 9920 of the Emerging Issues Task Force. Ruling 9920 requires that each year, or more often if the assumptions change, we will project the expected cash flows and book income equal to the internal rate of return. Any changes to the expected cash flows will be spread over the remaining life of the transaction through the newly calculated IRR. This is the same method we use to account for our CBO equity investments. Initially we expect the IRR on this investment to be approximately 17%.

# OVERVIEW OF ABBOTT LABORATORIES

Abbott Laboratories is engaged in the discovery, development, manufacture and sale of healthcare products and services. Abbott has five reporting revenue segments: Pharmaceutical Products, Diagnostic Products, Hospital Products, Ross Products and International. It also has a 50%-owned joint venture, TAP Holdings, Inc. The principal products of the Pharmaceutical Products Division are the anti-infectives clarithromycin, agents for the treatment of epilepsy, migraine and bipolar disorder, including Depakote, urology products, including Flomax for the treatment of BPH; Abbokinase, a thrombolytic drug, and the anti-viral Norvir, a protease inhibitor for the treatment of HIV. The Diagnostic Division's products include diagnostic systems and tests for blood banks, hospitals, and commercial laboratories. The Hospital Products Division sells drugs and drug delivery systems, intensive care products, cardiovascular products, renal products, and intravenous and irrigation solutions. The Ross Products Division sells adult and pediatric nutritionals such as Similac, Isomil, Ensure, Glucerna, and Pedialyte. The International Division's products include a broad line of hospital, pharmaceutical, and adult and pediatric nutritional products marketed and primarily manufactured outside the United States.

For the year ended December 31, 1999, Abbott had revenues and net income of approximately \$13.2 billion and \$2.4 billion, respectively. Abbott is rated "Aaa" by the major rating agencies. As of September 18, 2000, Abbott had a market capitalization of approximately \$74 billion.

## ABBOTT LABORATORIES CONSOLIDATED STATEMENT OF OPERATIONS

Fiscal Years Ended December 31,							
1997	1998	1999					
\$11.889	\$12,512	\$13,177					
•••,•••							
5 052	5,406	5,977					
	2,759	2,857					
- (	1,228	1,193					
	9,395	10,028					
3,000	,						
2 833	3,117	3,149					
•	102	81					
	(223)	(330)					
, ,	3,241	3,396					
		\$2,445					
32,017	,	•					
	•	December 31,           1997         1998           \$11,889         \$12,512           5,052         5,406           2,695         2,759           1,307         1,228           9,055         9,395           2,833         3,117           85         102           (186)         (223)           2,934         3,241					

# A. PROGRAM COMPOUNDS

There are eight Program Compounds included in this transaction. The Compounds are divided between late-stage and early-stage, including three Phase III, two Phase II, one Phase I, and two pre-clinical compounds. The Compounds are well-diversified from a disease/stage perspective, although several compounds are focused on the cancer market. Even within the cancer market, each of the Compounds targets either different types of cancer, or different mechanisms of action. The products are described more fully below:

Product ABT 980 (BPH)	Indication  Treatment of benign prostatic hyperplasia	JH Est Peak Sales (\$mm) 600	Expected E	Phase III 2003
ABT 773 (Ketolide)	Antibiotic	800	Expected Eastern	2003
ABT 627 (Endothelin)	Treatment of prostate cancer.	700	Expected Section	2003
ABT 594 (CCM)	Non-opiod, non-NSAID analgesic	700	DAPCEIGO COLITA	2004
E7010 (Anti-mitotic)	Cancer	500	Development Stage: Expected Launch:	Phase VII 2004
ммрі	Сапсет	400	Development Stage: Expected Launch:	Phase I 2005
FTI	Cancer	400	Development Stage: Expected Launch:	Pre-clinical 2005
Urokinase	Cancer	400	Development Stage: Expected Launch:	Pre-clinical 2005

# B. SUMMARY OF ESTIMATED SALES

In estimating sales projections by Program Compound, we started with determining the expected peak sales for each Compound. We have conservatively estimated the peak sales for each Compound based on our evaluation of market potential for each Compound relative to results for other similar drugs and expected competitive drugs. In general, our level of peak sales is significantly below Abbott's level (approximately 25%) -- but, because of the tiered royalty structure, the relative economic difference is not significant. Our next step was to use a Sales Curve calculated by Lehman Brothers that projects ramp-up and ramp-down for sizeable drugs. In general, this Curve shows peak sales being reached seven years after launch. Ramp-up is achieved by 5% of peak sales in the first year, followed by 13%, 25%, 50%, 80%, and 90%. Peak sales are maintained for three years, and the compound then achieves 85% of peak, 75%, 70%, etc. As expected, every compound has its own unique curve, and Lehman's is only a general estimate. We have compared the curve to IMS data of prescription sales for individual compounds in a number of drug classes from 1981 to 1999. Our analysis indicates that Lehman's curve is a good fit and we have applied that curve. The table below shows projected sales for each Compound and probability-weighted estimated sales for the entire portfolio of Compounds.

# ESTIMATED SALES PROJECTION

(\$ in millions) Name	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Projected Sales ABT-980 (BPH) ABT-627 (Endothelin)	30 35	78 91	180 210	300 350	480 560 640	540 630 720	600 700 800	600 700 800	600 700 800	510 595 680	0 0 0	0 0 0
ABT-773 (Ketolide) ABT-594 E7010 (Anti-mitotic)	40	104 35 20	240 91 52	400 210 120	350 200	560 320	630 360	700 400	700 400	700 400	595 340	0
MMPI FTI			20	52	120	200	320	360	400	400	400	340
Urokinase  Total Projected Sales	105	328	793	1,432	2,350	2,970	3,410	3,560	3,600	3,285	1,335	
Estimated Sales	76	225	531	932	1,510	1,837	2,068	2,129	2,138	1,908	530	74

For projection purposes, MMPI, FTI and Urokinase are considered as one Program Compound with a Phase I probability of success.

# C. MILESTONE AND ROYALTY PAYMENTS

Under the Agreement, Abbott agrees to pay to John Hancock royalties on aggregate worldwide Net Sales of Program Compounds (all Program Compound sales combined) at the following rates: 8% on the first \$400 million, 4% on the next \$600 million, 1% on the next \$1 billion, and 1/2% on any amount above \$2 billion. Abbott's obligation to make royalty payments will commence on the date of the First Commercial Sale of a Program Compound and will continue with respect to Net Sales of such Program Compound for a period of ten years. Not withstanding the foregoing, the obligation to make royalty payments on all Program Compounds will not begin until after the second anniversary of the Program Term and will cease at December 31, 2014. Based on our estimate of aggregate sales for the Program Compounds, we expect the following amounts of Royalty Payments:

(S in millions) Name	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimated Sales	76	225	531	932	1,510	1,837	2,068	2,129	2,138	1,908	530	74
Royalty Payments 8.0% on \$400 mm 4.0% on \$400-\$1,000 1.0% on \$1,000 - \$2,0 0.5% on \$2,000+	6 0 0	18 0 0	32 5 0	32 21 0 0	32 24 5 0	32 24 8 0	32 24 10 0	32 24 10	32 24 10	32 24 9 0	32 5 0 0	6 0 0
Total Royalty Pymts (average percent)	6 8.0%	1 <b>8</b> 7.0%	37 5.7%	53 4.0%	61 3.5%	64 3.2%	66 3.1%	67 3.1%	67 3.1%	65 3.4%	3 <b>7</b> 7. <b>0%</b>	8.0%

In addition to the Royalty Payments, Abbott will be obligated to make payments to John Hancock for certain milestones achieved for each compound. The milestone and the corresponding payments are described below. Aggregate milestone payments paid by Abbott, for all "non-NDA Approval" milestones achieved will not exceed \$12 million. Aggregate milestone payments paid by Abbott, for all "NDA Approval" milestones achieved will not exceed \$40 million. In addition, "non-NDA Approval" milestone payments will not exceed \$3 million in the first year or \$6 million in the second year after commencement of the Program Term.

	_	
Upon the allowance of an IND application by the FDA:	\$	1,000,000
Upon the initiation of a Phase I Clinical Trial:	\$	2,000,000
Upon the initiation of a Phase II Clinical Trial:	\$	3,000,000
Upon the initiation of a Phase III Clinical Trial:	\$	4,000,000
Upon the filing of an NDA application with the FDA:	\$	5,000,000
Upon NDA Approval by the FDA:	\$	10,000,000

Based on the number of Compounds in the Program and the number of potential milestones for each Compound, we expect to receive \$3 million, \$6 million, and \$3 million of "non-NDA" milestone payments in the first three years. In addition, we expect to receive \$20 million in 2003 and \$10 million in 2004 for NDA Approvals.

In aggregate, the management fees, milestone payments, and royalty payments are approximately 4.3% of Net Sales of the Program Compounds. The tiered structure of the royalty payments and the up-front milestone payments, however, substantially reduce the downside of the transaction in the event that aggregate net sales are below our expected case. For example, if sales were 25% below projected, a flat 4.3% royalty rate would yield a loss ratio of 4% versus a loss ratio of 1.6% when using the tiered structure.

# D. ESTIMATED CASH FLOW PROJECTIONS

Based on the calculations of Net Sales and Milestone and Royalty Payments, which are described above, the Cash Flow of this transaction is as presented in the table below. In particular, the structure provides for adequate current income during the first two-to-three years when there are no approved Compounds, and substantial current royalty income based on Net Sales of approved Compounds.

(\$ in millions) Name	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
JH Cash Payments	(50)	(55)	(55)	(60)											
Management Fee	` 0	2	2	2	2										
Milestone Payments	0	3	6	23	10										,
· ·	0	0	0	6	18	37	53	61	64	66	67	67	65	37	6
Royalty Payments Aggregate Cash Rov'd		_		31	30	37	53	61	64	66	67	67	65	37	6
JH Net Cash Flow	(50)	(50)	(47)	(29)	30	37	53	63	64	66	67	67	65	37	6

The projected bond equivalent yield for this transaction is approximately 17.5% and the cash to invested capital ratio is 2.7 times.

# E. SUMMARY BUDGET

Abbott will be using the funds from this transaction to invest in the research and development of a specific pool of drug compounds, and to pre-fund management fees and projected milestone payments. These funds will be part of a total investment by Abbott of approximately \$1,300 million during the next ten years and \$900 million over the four year co-investment period. In addition, based on the stage of the development of the Program Compounds, and their expected sales, we have valued the Program Compounds today at approximately \$1 billion. Our valuation is based on our knowledge of "out-licensing" transactions between pharmaceutical companies and the milestone and royalty structure that is market for different stage compounds. In general, out-license transactions provide the licensor with a royalty rate of between 10% (for Phase I compounds) to 30% (for Phase III compounds) and a 50/50 split for compounds that have completed Phase III. Using an average 20% royalty applied to estimated sales and a 15% discount rate, we arrived at a value of approximately \$1 billion.

The following table summarizes the Company's expected budget during the Program Period:

(S in millions) Name	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Total
Projected Budget				20	20	20	10	10	10	10	10	270
ABT-980 (BPH)	80	40	30	30		20	20	10	10	10	10	220
ABT-627 (Endothelin)	40	40	20	20	20	-	27	17	17	17	17	428
ABT-773 (Ketolide)	135	60	42	42	27	27	-	• •	10	10	10	310
ABT-594	70	80	30	20	20	20	20	20			. 5	175
	20	30	35	20	30	10	10	5	5	5		
E7010 (Anti-mitotic)	20	30	35	20	23	15	15	5	5	5	. 5	178
MMPI		10	37	17	15	15	5	, 5	5	5	5	124
FTI	5			33	15	15	5.	. 5	5	- 5	5	163
Urokinase	15	25	35			142	112	. 77	67	67	67	1,868
Total Projected Budget	38.5	315	264	202	170	142	. 112	. ''	•	•		
Estimated Budget	327	250	201	134	90	81	66	45	40	40	40	1,314

# TRANSACTION ANALYSIS

The structure of this transaction (which includes a diversified pool of eight Abbott compounds, and a tiered royalty structure) offers a substantial likelihood that we will receive a long-term bond equivalent yield of approximately 17.5% which is substantially greater than the inherent risk of the transaction.

#### Expected Return.

Determining the fair economics of the proposed transaction is highly dependent upon the number of compounds included, the characteristics of the compounds (i.e. status of development, potential sales), the structure of the royalty rates, and an estimation of what is a fair return. To help us answer these questions, we have taken several steps. First, we have researched industry standards for likelihood of success and probable sales curves for compounds in different stages of development. Second, we have developed a spreadsheet model that calculates the rate of return for a chosen portfolio and have developed a minimum number of compounds and associated milestone/royalty payments to provide us with returns that adequately compensate us for the risk we are taking. Third, we have tried to determine what rate of return the capital markets would require for the level of risk that we are willing to take.

The Program Compounds consist of five of Abbott's late-stage development compounds and a basket of three pre-clinical cancer compounds. The late-stage compounds range from mid-Phase II to starting Phase-III. Peak annual sales for these compounds range from \$400 million to \$800 million. With the exception of the "cancer basket", the compounds are independent of each other. Our due diligence provided us with results consistent with Abbott's representations and expectations for the Program Compounds, although we have scaled back sales projections significantly.

Our scientific and market diligence for the portfolio of compounds coasisted on a number of steps. As a first step, we received internal scientific and business write-ups from Abbott for each Program Compound. The material provided by Abbott demonstrated the scientific rationale for the compounds, results of clinical trials, and a competitive analysis. Through financial reports, we searched for all references to Abbott's compounds and ail references to competitive compounds in the same class or same disease category. We used this information to evaluate the potential size of markets for the Program Compounds and their competitive landscape. We engaged Dr. Lynn Klotz to search the major drug and medical databases for scientific reports on the Program Compounds and competitive compounds in the same class or same disease category. We used this information to evaluate, from a scientific perspective, what research scientists had discovered about the Program Compounds from an efficacy and safety perspective. We also used this information to identify potential experts to contact for additional questions. Finally, Dr. Klotz contacted the experts on a non-disclosure basis (not revealing that we were looking at Abbott compounds) and asked the experts to assess the Program Compounds and any potential competitive products from an efficacy and market potential perspective. In summary, none of our diligence revealed any information that was materially different than what Abbott had provided to us.

Dr. Lynn Klotz is a former professor of Biochemistry and Molecular Biology at Harvard University and a former officer of two biotechnology companies, BioTechnica and Codon. Dr. Klotz is currently an independent consultant. His most recent assignment was as a member of a four-person team consulting with the President of Mississippi State University to provide a strategic plan for their Life Sciences Institute.

Probabilities of Success

Based on the development stage of each compound, we assigned probabilities of success ("regulatory approval") and time to success for each compound. Our probabilities of success come from a 1995 study by Dr. Joseph A. DiMasi at the Tufts Center for the Study of Drug Development, and were modified based on our specific knowledge of the Program Compounds. Dr. DiMasi's study is generally accepted by the pharmaceutical industry as an accurate assessment of the probability of success and of the time and costs associated with drug development. Dr. DiMasi looked at a random sample of 93 compounds in four broad disease categories from 12 pharmaceutical companies that were first tested in humans between 1970 and

## Dr. DiMasi's results are summarized below:

## PROBABILITY OF SUCCESS

Entering Phase	NSAID	Cardio- vascular	Anti-infective	Neuro-pharm	All
I	22%	26%	30%	20%	23%
II	30%	41%	38%	22%	31%
III	71%	72%	77%	51%	63%

Dr. DiMasi calculated the average time to approval as 8.75 years for compounds entering Phase I, 7.5 years for compounds entering Phase II, and 5.5 years for compounds entering Phase III. Embedded in these times was an approximately 30-month review process by the FDA. Due to legislative and process changes, the average FDA review time is now approximately 12 months. A revised timeframe for approval (which was been published by TCSDD in 1999), based on accelerated review by the FDA, and quicker processes within the pharmaceutical companies, is 6.0 years for Phase I, 5.0 years for Phase II, and 3.0 years for Phase III.

### Sales Estimates

In estimating sales projections by Program Compound, we started with determining the expected peak sales for each Compound. We have conservatively estimated the peak sales for each Compound based on our evaluation of market potential for each Compound relative to results for other similar drugs and expected competitive drugs. In general, our level of peak sales is significantly below Abbott's level (approximately 25%) - but, because of the tiered royalty structure, the relative economic difference is not significant. Our next step was to use a Sales Curve calculated by Lehman Brothers that projects ramp-up and ramp-down for sizeable drugs. In general, this Curve shows peak sales being reached seven years after launch. Ramp-up is achieved by 5% of peak sales in the first year, followed by 13%, 25%, 50%, 80%, and 90%. Peak sales are maintained for three years, and the compound then achieves 85% of peak, 75%, 70%, etc. As expected, every compound has its own unique curve, and Lehman's is only a general estimate. We have compared the curve to IMS data of prescription sales for individual compounds in a number of drug classes from 1981 to 1999. Our analysis indicates that Lehman's curve is a good fit and we have applied that curve. The table below shows projected sales for each Compound and probability-weighted estimated sales for the entire portfolio of Compounds.

#### Financial Model and Results

We've modeled the returns on this portfolio of drugs using a Monte Carlo simulation and assuming their probabilities of success are independent. Let's start, however, with some simplifying assumptions to get better intuition on the risk of the transaction. Assume the probability of success of each drug is 50%, the drugs are independent, and that the success of any one drug will give us a return of 8% on the transaction. In this case, we will lose all our investment only if all the drugs fail. The probability of this is  $(1/2)^6 = 1.6\%$ . Spread over a 4 year duration, the expected annual loss is 40 basis points which implies the same risk as a Baa3 bond. If only one drug is successful, which should occur with the probability of (1/2)6 \*(6!/1!) = 6/64 = 9.4%, the return, in our simplified model, is 8% on the entire investment. This is approximately 200 basis points over Treasuries. If two or more drugs are successful, the structure caps the investment's return at

This example is obviously a simplification. Each of the drugs has a different probability of success, depending upon how far along each is in the approval process, and a different revenue profile. To reflect the different probabilities and different revenue streams, we developed a spreadsheet model that incorporates multiple drug compounds (and their specific probability of success, time to launch, and expected sales pattern) and a variable milestone/royalty structure. We then ran the spreadsheet model 500 times to provide us a range of outcomes as well as the expected results for returns and losses.

In our base case, we have made the following assumptions:

	71	JH Probability Of Approval	Launch	JH Peak Sales
Product	Phase	65%	2003	\$600 mm
BPH	Phase III		2003	\$800 mm
Ketolide	Phase III	70%		
	Phase III	70%	2003	\$700 mm
Endothelin		50%	2004	\$700 mm
CCM	Phase II		2004	\$500 mm
Antimitotic	Phase I/II	40%		\$400 mm
MMPI	Phase l	10%	2005	
	PC	10%	2005	\$400 mm
FTI	PC	10%	2005	\$400 mm

... and calculated the average bond equivalent yield of this scenario to be approximately 17.3%. It is important to note that the expected IRRs are over a long period of time (15 years). Assuming that we could sell our future royalty stream after the fifth year, our five-year IRR would be about 22%.

## Analysis of Return

The last step of our analysis was to determine what a fair economic return for this transaction should be. We have benchmarked this transactions in a number of ways, such as: R&D vehicles for pre-clinical compounds were sold with expected IRRs (over a three-to-five year period) of approximately 40%; Hambrecht & Quist has estimated pharmaceutical IRRs for single phase-II compounds to be 40% and single phase-III compounds to be 25%; the Palisade Partners (Sony movies) transaction that we participated in last year has an expected IRR of 20%; Elan Pharmaceuticals' pooled transaction has an expected five-year IRR of 13%; limited partner equity funds have about a 25% expected net IRR; and our proprietary analysis of the equity market's IRR for Abbott's entire R&D pipeline of 16-22%. Based on these comparisons, we think that an IRR of 17% over a long period of time is reasonable.

We also evaluated the relationship between our investment (and Abbott's) in the entire portfolio and the average royalty rate that we expect to receive - which is approximately 4-5%. We estimate that the current value of the compounds that Abbott is contributing to the transaction is about \$1 billion. During the four year investment period, Abbott expects to invest \$800 million on the compounds, in addition to our \$200 nullion. Based on these amounts, our investment is approximately 10% of the total invested dollars. Most pharmaceutical companies earn about a 50% pre-tax margin (excluding R&D expenses) on sales. On a net basis, then, our expected royalty and milestone percentage should be about 5%.

#### Risk Analysis.

The fundamental risks of this transaction are whether Abbott receives marketing approval from the FDA for a sufficient number of the Program Compounds and whether the commercial success of the Compounds are as we expect. In developing the expected return, we have made a number of reasonable assumptions regarding the probability of obtaining FDA approvals, acceptance of the products in the marketplace and competition. In many cases, our assumptions are significantly more conservative than Abbott's.

Again looking at our base case (which is demonstrated in the Chart I on the next page), the probability of no successful drugs is approximately 1.7% (the bar on the left). There are also a number of scenarios that produce a return of approximately 1% - 2%. These scenarios arise when only a cancer drug is successful. The cancer drugs have lower anticipated revenues, as well as lower probabilities of success, than any of the other drugs. This represents about 1.6% of the scenarios. All other scenarios give us a return of 9% or more. Assuming a 1-2% return represents a loss of half our original investment, the expected loss in this simulation is 1.7% + 1/2\*1.6% = 2.5%. Spread over a four year duration, the annual expected loss is 62 basis points which corresponds to the risk of a Bal rated bond.

We also ran a downside simulation, where the probabilities of success are discounted by 25% from the DiMasi study and the expected revenues are discounted by 25% from our base case (this is shown in Chart II on the next page).

The average return in this downside scenario is 9.3%. The probability that no drugs are successful rises dramatically to 4.9%. The low return scenario is now even lower (-2%) and also has a higher probability (2.7%). So, the annual expected loss is (4.9% + .6\*2.7%)/4 = 165 basis points which corresponds to the risk

CHART I BASE CASE

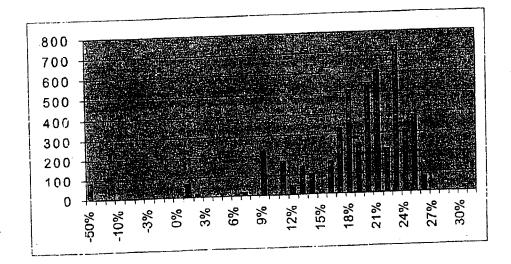
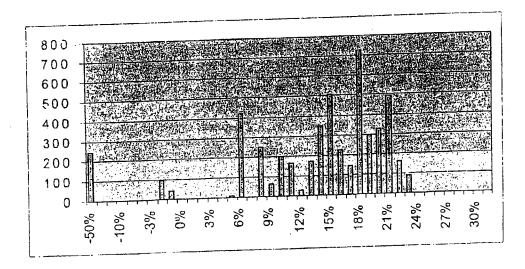


CHART II DOWNSIDE SCENARIO



## APPENDIX PRODUCT DESCRIPTIONS

ABT-980 is a selective alpha blocker for the treatment of benign prostatic hyperplasia ("BPH"), a disorder that effects approximately 10 million middle-aged and elderly males in the U.S. The primary sympton of BPH is obstruction of urinary outflow and increased frequency of urination. Global sales of BPH products is approximately \$2 billion and is expected to continue to grow as the population ages and as better treatments become available. Currently, alpha blockers, including Abbott's Hytrin which recently became generic, are the most frequently prescribed pharmaceutical treatment for BPH. ABT-980 has the benefit of other alpha blockers, but since it only inhibits alpha receptors in the urinary tract, side effects on the cardiovascular system and central nervous system are expected to be reduced substantially.

One other selective alpha blocker, Boehringer Ingelheim's Flomax, the FDA and has been on the market since 1999. Flornax's current sales are approximately \$300 million. Abbott completed Phase II clinical trials and entered Phase III trials this past summer. In its Phase II trials, Abbott demonstrated that it is effectively equivalent (based on safety and efficacy) to Flomax.

This mouth, Abbott has learned that in long-term studies with rats, that about 15% of the rats given ABT-980 developed gallstones. Abbott does not know if these results are applicable to humans and at what frequency; however, there is no evidence of gallstones in humans to-date. In addition to its usual clinical trials, Abbott will try to determine whether gallstones will develop in humans over the long-term and what implications that may have. If ABT-980 fails due to this gallstone issue, Abbott will replace ABT-980 with another compound.

Abbott expects to submit ABT-980 for approval in June 2002 and launch the product in August 2003. The patent on ABT-980 expires in 2016.

E-7010 is a compound that Abbott licensed from Eisai Co. Ltd. in July 2000. E7010 has completed Phase I trials for various oncology applications. E7010 is an oral medication with a unique mechanism of action that enables it to stop cell mitosis with fewer side effects than current cytotoxic therapies. Although financial terms of the Abbott-Eisai agreement have not been publicly disclosed. Abbott is committing \$25 million in up-front and milestone payments to Eisai and will pay a double-digit royalty percentage on net sales. As a result of in-licensing E7010, Abbott has discontinued development of its own internally developed "anti-mitotic" compound.

Anti-mitotic compounds are not new. Taxol, the largest selling cancer drug, is an anti-mitotic. E7010, however, binds to a different site of a cell's microtubules than Taxol, and inhibits cell proliferation in a unique manner which is believed to cause fewer side effects.

E7010 has successfully completed Phase I clinical trials in Japan. These trials may be repeated in the U.S. but Abbott expects to move quickly into Phase II trials. Abbott expects to submit E7010 for approval in 2003 and launch the product in 2004. The patent on E7010 expires in 2011.

Our scientific consultants, Dr. Dennis A. Carson, UCSD School of Medicine, and Dr. John Kavanaugh, Ir., MD Anderson Cancer Center, did not have specific knowledge about the Abbott/Esai compound. However, each researcher provided us with consistent critical benchmarks to evaluate the compound (such as whether the compound has been tested against specific cancer cell lines, whether the compound has been tested in combination with other anti-cancer agents. We have confirmed that Abbott independently addressed these critical benchmark and received positive results.

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ABT-773 (Ketolide)

ABT-773 is a member of a novel group of ketolide antibiotics within the macrolide group of antimicrobials. Ketolides have a similar mechanism of action to other macrolides such as Pfizer's Zuhromax and Abbott's Biaxin. Unlike macrolide antibiotics, ketolides are active against s. pneumonia and h. influenza. The antibiotics market size is approximately \$25 billion; macrolides account for approximately 13% and have an increasing market share. Only one ketolide (Ketek) is in advanced clinical trials; this compound, discovered by Aventis, was approved for sale in Europe and was been submitted to the FDA for approval in February 2000. Aventis expects to launch Ketek in 2001.

ABT-773 entered Phase III clinical trials this past summer. Abbott expects to submit ABT-773 for approval in June 2002 and launch the product in August 2003. The patent on ABT-773 expires in 2016.

Our scientific consultant, Dr. Robert C. Moellering, Jr., Harvard Medical School and Beth Israel Medical Center, confirmed the scientific rationale for ketolides and their market potential. Based on information that he has seen, Dr. Moellering believes that ABT-773 has more promise than Aventis' Ketek.

ABT-594 is a non-opiod, non-NSAID analgesic compound that is orally-administered for the treatment of diabetic neuropathic pain. In animal models, the compound has been shown to be substantially more potent than morphine with a better side effect profile. Neuropathic pain is a substantial and underserved market. Approximately 4-5 million people are thought to suffer from neuropathic pain but only a few medications provide complete pain relief and most medications have significant side effects. As more effective and tolerable medications become available, the neuropathic pain market is expected to experience significant growth.

ABT-594 is currently in Phase II clinical trials. If Phase II and Phase III trials are successful, Abbott expects to submit ABT-594 for approval in May 2003 and launch the product in July 2004. The patent on ABT-594 expires in 2016.

Our scientific consultant, Dr. Mitchell Max, NIH, eliminated an initial concern of ours that the "therapeutic window" of ABT-594 was too short and would potentially block approval. Dr. Max indicated that ABT-594's therapeutic window was acceptable. Dr. Max was not able to fully address execity issues raised by two of Abbott's competitors that the compound demonstrated opiod-like side effects in mice. These toxicity issues have not been found by Abbott in its mice or human trials. Dr. Max believed that ABT-594 showed a good profile in mice.

ABT-627 is an inhibitor of a family of endothelin peptides that cause constriction of vascular muscles and stimulate cell proliferation. ABT-627 is currently being developed by Abbott for the treatment of prostate cancer, and other cancer types.

Prostate cancer ("PCA") is the most common cancer to strike non-smoking men. Approximately 1.7 million men live with prostate cancer in the U.S., and there are approximately 180,000 newly diagnosed cases each year. The primary treatment of advanced stage PCA is hormone therapy. Patients receiving hormone therapy become resistant to this treatment after two to three years and then have a life expectancy of only about twelve months.

The primary benefit of ABT-627 is to reduce the pain associated with PCA and to delay the progression of the disease (but not necessarily improve survival).

ABT-627 is currently in Phase III clinical trials. If Phase III trials are successful, Abbott expects to submit ABT-627 for approval in December 2003 and launch the product in June 2004. The patent on ABT-627 expires in 2015.

Our scientific consultant, Dr. Joel Byron Nelson, MD, University of Pittsburgh, has indicated that ABT-627 is safe, significantly reduces pain associated with PCA, and delays disease progression.

MMPI is an inhibitor of enzymes called matrix metalloproteinase that degrade a wide range of protein substrates. High expression of these enzymes occurs in cancer and is associated with the ability of tumors to grow, invade, develop new blood vessels and metastasize.

The MMPI field is competitive. More than 30 firms have filed patents and several companies have compounds in advanced clinical development. Abbott's MMPI has the potential competitive advantage of a better side effect profile. It appears to exhibit less arthritis and tendonitis of the upper joints that its competitors. This compound is currently being evaluated in Phase I clinical trials.

Abbott hopes to submit MMPI for approval in 2004 and launch the product in 2005. The patent on MMPI expires in 2018.

FTI is an inhibitor of enzymes called farnesyltransferase that assist certain proteins, such as the Ras protein, which are critical for malignant growths.

The FTI field is competitive. Approximately four compounds are in clinical development, and an additional five are in pre-clinical studies. Abbott has not yet chosen a specific FTI to enter into human clinical trials. It expects to enter human clinical trials in 2001

Abbott hopes to submit FTI for approval in 2004 and launch the product in 2005. The patent on FTI is not expected to expire prior to 2014.

Urokinase is an inhibitor of enzymes called urokinase which are believed to promote the metastases of numors by breaking down cell membranese.

The Urokinase field is less well-developed than MMPI and FTI. No compound has currently made it into clinical trials. Abbott is currently evaluating several compounds. If Abbott fails to take a Urohinase compound into clinical trials, Abbott will substitute another Phase I compound into the Program.

Abbott hopes to submit Urokinase for approval in 2004 and launch the product in 2005. The patent on Urokinase is not expected to expire prior to 2014.

Our scientific consultant, Dr. Edward Sausville, National Cancer Institute, has indicated that "cytostatic" therapies such as MMPI, FTI and Urokinase may be useful upon recurrence of cancer as a means to stopping the progression of the disease. He believes that they will be useful in combination with other therapies and may not be exceptional compounds by themselves.

# **Deposition Exhibit 7**

## BOND INVESTMENT COMMITTEE

September 21, 2000

Present:

Messrs./Mss. Blewitt, Braun, Davis, DeCiccio, Felcon, Metzler and Nastou.

Attorney-Seghezzi. Secretary Pro Tem-Weber.

#### I. PURCHASE RECOMMENDATIONS

Abbott Laboratories A.

(S. Blewitt)

Recommend purchase of \$220 million 20%

(expected) Research and Development

Funding Commitment.

#### BETWEEN-MEETING TRANSACTIONS II.

В. Report of Purchases See Yellow Report

C. Report of Sales See Yellow Report

# REDACTED

III. VOTE REQUEST

#### IV. REPORTS FOR INFORMATION

E. Swap Report

Also Attending:

Messrs./Mss. Brown, Cavanaugh, DeLeon, Della Piana, Forde, Gelormini,

Harris, Hartz, Hasson, Hodge, Johnson, D., Johnson, J., Kinsley,

Knowlton, Kruez, Lee, Lucido, Martin, McDonough, J., McDonough, K., McWatters, Mencis, Morrison, Moses, Nguyen, Parsons, Schaffer, White,

Wise and Wong.

SECRETARY PRO TEM

# **Deposition Exhibit 8**

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Page	

# John Hancock Life Insurance Company Boston, Massachusetts

Committee of Finance Records

October 10, 2000

A meeting of the Committee of Finance was held on this date, with Chairman Brown presiding.

Present:

Messrs. Brown, D'Alessandro, Aborn, Gifford, Linde, Morton,

Syron and Tarr

Also Present: Messrs. DeCiccio, Budd and Rubenstein, Secretary

# REDACTED

The meeting was called to order by Chairman Brown. The minutes of the prior meeting were approved.

# REDACTED

The Bond and Corporate Finance Group materials were presented by Roger Nastou. A question and answer period followed the presentation. See Attachment B for Votes approving investments with respect to Abbott Laboratories and and Reports of Purchases, Sales, Modifications and Swaps approved between meetings. A Report of Bond and Corporate Finance Group Investments and Available Capacity in Below AA - Country Investments was submitted. Materials are on file with the Secretary.



Numerous transaction reports were submitted by the Company's investment managers. These are included in the minutes.

Meeting of October 10, 2000

John Hancock Life Insurance Company Committee of Finance Records

Page,

Attachment B

VOTED:

To authorize purchase, at par, of up to

99,000,000.

for the General Account, and up to for the Guaranteed Benefit Sub Account.

110,000,000.

ABBOTT LABORATORIES \$220 Million Research and Development Funding Commitment

Subject to approval of all legal details by our Law Department.

REDACTED

Meeting of October 10, 2000

John Hancock Life Insurance Company Committee of Finance Records

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There being no further business, the meeting was adjourned.

ATTEST:

SECRETARY

Messrs./Mss. Acford, Agretelis, Atamian, Blewitt, Britt, Budde, Clark, Curtis, Davis, Della Piana, Felcon, Freiberger, Garrison, Gottlieb, Hahesy, Han, Harris, Hartz, Henderson, Hines, Johnson, J., Lacasse, McAneny, McDonough, J., McDonough, K., McPadden, Mongeau, Nagle, Nastou, Navin, Nectow, Nierintz, Panthaki, Ray, Reitano, Revers, Santosuosso, Schaeffer, Stapleton, Steggall, Talbot, White, Wise and Yang.

# **Deposition Exhibit 10**

FW: Abbott Labs -- Heads up

Page 1 of 1

Welch, Barry [bwelch@jhancock.com] From:

Friday, March 14, 2003 4:32 PM Sent:

To: Blewitt, Stephen

Cc: Nastou, Roger

Subject: FW: Abbott Labs - Heads up

#### Steve:

I had a good conversation w/ John about

- context of equity investing program (this, project equity, etc.)
- confirmed that we hold on BA schedule, w/ 30% RBC charge
- he reacted especially to size I suggested more like 8 separate "bets" totaling up to \$220mm
- reviewed low odds that none hit, only one hits, etc.

Also suggested that he could probably visit with you a bit more on the background of our thinking about/support for Odds on drugs at stage x, y, z with FDA of receiving final approval.

Beyond just Abbott, I want him to have a chance to get a better feeling for the strength of our analysts - how we think about risk, ratings, etc. so we build credibility over time.

Thanks, Barry

-----Original Message-----

From: Mastromarino, John

Sent: Friday, March 14, 2003 8:59 AM To: Welch, Barry; Nastou, Roger

Abbott Labs Subject

Hi guys, well, I read the write-up on the 220MM last night, a very thoughtful piece and certainly a lot of effort and research went into the approval document. I must say it is a bit too rich for my taste with too many assumptions and unknowns; and how would I ever explain should it not work out as predicted. But even if I could get comfortable with the legitimacy of it all, the size of this deal is beyond my threshold, and certainly beyond the house limit for what is, at best, a B rated credit risk. All driven, no doubt, by our need to continually reach for yield to meet corporate ROE goals, i

John L. Mastromarino Chief Risk Officer **Enterprise Risk Management** 617-572-6262 617-572-6212 (fax)

